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bulletin

The University of New Brunswick has been the centre stage for two years now of a controversy focusing on university autonomy and the safety of the environment of that province.

For extended periods during 1978 and 1979 and continuing into the present, faculty at the University of New Brunswick have been deeply involved in a dispute concerning a possible link between environmental damage on the one hand and university autonomy and objectivity on the other. The controversy centres on the appointment of Dr. I.W. Varty, a forestry scientist with Environment Canada to a position within the university. It has been alleged that the appointment was made in haste with insufficient regard for UNB procedures. It has also been alleged that it was carried out in response to pressure on the university from the provincial government to provide an academic shelter for a program likely to generate considerable controversy.

Dr. Varty is chairman of EMOFICO (Environmental Monitoring of Forest Insect Control Operations), an independent inter-government and industry body to monitor the environmental effects of spraying to control forest insects, specifically the spruce budworm, in New Brunswick. Dr. Varty is regarded by many as a proponent of continued spruce budworm spraying. However, Dr. Varty strongly denies that his professional judgement is influenced by spray-proponent agencies or that his objectivity is swayed by personal bias. He believes that the controversy in New Brunswick is an attempt to expose a conspiracy or manipulation which never existed.

Initially under the aegis of Environment Canada, the federal department suggested unexpectedly in March, 1978 that it would be appropriate for New Brunswick to assume greater responsibility for monitoring the environmental effects of forest spraying since the problem was judged to be within provincial jurisdiction. A related reason for the federal withdrawal may have been increasing criticism in the province of health hazards associated with a thirty year

New Brunswick spray monitoring program

Varty appointment sparks controversy

by Victor W. Sim

program of spraying New Brunswick forests with a variety of insecticides (fenitrothion and matacil, for example). The agencies which had been involved in monitoring the program may have been persuaded to lower their profile following publication of the report of an NRC panel in 1977 expressing lack of confidence in procedures for monitoring the effects of spraying in the province. This report was criticized by Dr. Varty who found some of the judgements "superficial, pretentious or invalid."

It was intended initially that with the transfer of responsibility for the monitoring program, Dr. Varty would relinquish the chairmanship of EMOFICO to a provincial appointee, though Environment Canada indicated that it would continue to support the program with money and services.

At this early stage in discussions concerning sponsorship of EMOFICO, it was suggested by federal representatives that the University of Moncton might "take the lead in chairing this committee". However, nothing was later heard of possible Moncton involvement. Instead, in late April 1978, Dr. F.E. Webb, then special advisor to the New Brunswick Minister of Natural Resources, wrote to Dr. John Anderson, then president of the university, proposing that leadership of the committee, "should come from a disinterested agency such as the university community". Dr. Webb indicated that the province would be prepared to provide funds to make a university staff position available for the appointee. It was apparently assumed at this time that the university would make an appointment to replace Dr. Varty.

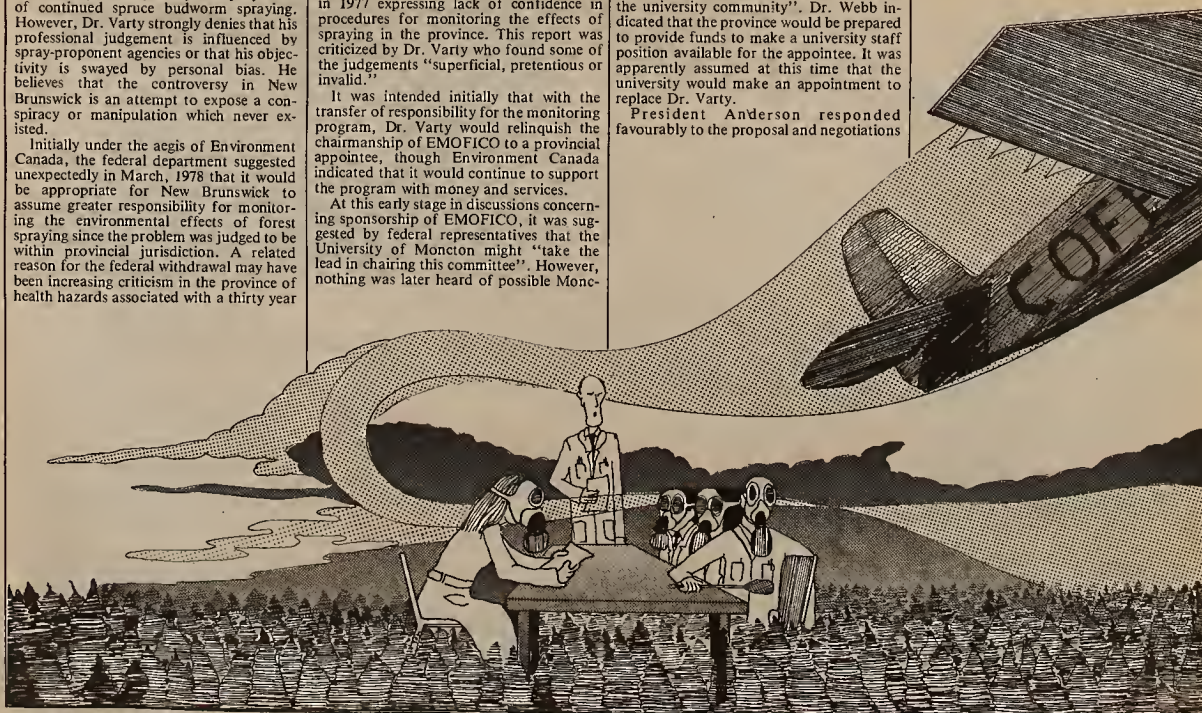
President Anderson responded favourably to the proposal and negotiations

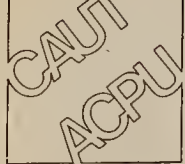
of the details of the appointment began. It seems clear that the university intention was to play a useful role in the province by providing a home base for an independent chairman of EMOFICO which would function as a neutral technical monitoring body.

An exchange between Dr. Anderson and Dr. Webb, which took place early in the negotiations of the appointment, has been interpreted as an indication that those who were suggesting a UNB base for EMOFICO did not really wish to see a truly independent chairman appointed. When Dr. Webb was advised by President Anderson that Vice-President Mervyn Franklin would be handling negotiations for the university, Dr. Webb questioned the assignment apparently because Dr. Franklin was regarded as "environmentalist". He made critical comments about a letter Dr. Franklin had written to the press some two years earlier expressing concern about the possible health effects of forest spraying.

On June 15, 1978, Dr. Webb proposed unexpectedly to the university that Dr. Varty, because of his credentials and experience, be seconded to the university as

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LETTERS LETRES

Act potentially disastrous

The CAUT position on the proposed freedom of information law (December Bulletin, p.3) seems to imply that the only needed improvements are in the direction of requiring stricter compliance. I take strong exception to this. The present Canadian Human Rights Act is potentially disastrous for the grants-in-aid of research programs of NSERC and other granting agencies. These programs rely on peer assessment. The most probable result of subjecting the granting councils to this law would seem to be, initially, a progressive deterioration in the quality of referee reports. This is difficult to document fully, but certainly seems to be happening. Unfortunately, there are worse possibilities. Should a major court case arise, I suspect that the referee system would collapse overnight. We would then be faced with a return to the "old-boys system" where a small number of people are, in effect, forced to pass judgement on some people about whose work they really know very little.

I believe that the best interests of all members of the academic community in Canada require that granting agencies such as NSERC be exempted from the Canadian Human Rights Act, and certainly from any Freedom of Information laws. I trust that the CAUT will take a responsible position in this matter.

Yours sincerely,
E.J. Woods
Professor of Mathematics
Queen's University

Attitude demeaning

I read with some consternation Professor Mathie's comments on professional philosophers in the December Bulletin. Mathie pretends that the "sophists" (with all the bad connotations Plato gave that word) were the professional philosophers of Socrates' Athens. It is true that some of them held philosophical views, usually of a sceptical or relativistic nature, and true that they tutored young men for money. But it is doubtful that Athenian fathers were interested in their sons acquiring such ideas; if they paid hard *drachmae* for these lessons (there was no public school system), it is more likely they wanted their children to become skillful in *rhetoric*, so they could effectively participate in the Athenian democracy, which included pleading not only causes but legal cases where money was involved. In other words, the sophists were the professional teachers of law and politics (Mathie's own subject), not of philosophy.

Mathie further suggests that there is something irreconcilable about being a professional philosopher and seeking the protection of a trade union association. It is not as philosophers that one seeks such protection, but as university employees concerned to preserve standards of fairness and justice and academic freedom in increasingly difficult financial conditions.

But probably the most disturbing aspect of Mathie's letter is the attitude it displays towards philosophy itself. Is philosophy the sort of thing that anyone can do and do equally well, regardless of professional training and in the absence of dialogue with those who have had this training and do indeed engage in dialogue with others? It is demeaning to the discipline of philosophy to imply that this is the case, and insulting to those who have given their lives to that discipline.

As for there being questions professional

philosophers have decided to ignore, no doubt this is true. But that is because some questions are too trivial or boring or parochial or misconceived to be worth paying attention to. Attending to them will not convert philosophical amateurs into professionals, let alone make the amateurs wiser beings than professionals.

Yours truly,
Roland Puccetti
Professor
Department of Philosophy
Dalhousie University

Cambodian refugees

May I try to dispel some of the confusion that appears wide-spread on the efforts to provide relief to Cambodian refugees.

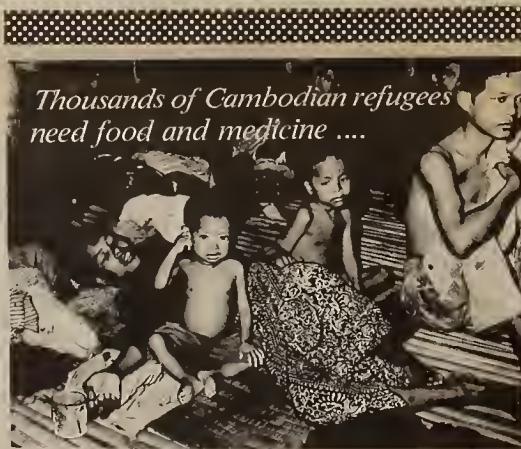
Although I can say very little about the situation within *Reamnophe* (which is where UNICEF and the International Committee of the Red Cross are directing the effort, I do have first-hand reports from CARE workers in Thailand which testify to the high degree of co-operation existing between the various agencies and organizations ministering to the sick and hungry in the refugee camps.

There is an actively functioning council called the Committee for Co-ordination of Services to Displaced Persons in Thailand (CCSDPT) which meets at least once a week and allocates responsibilities to participating agencies.

Leadership in co-ordinating these activities comes from the United Nations High Commissioner for Refugees (UNHCR) and the International Committee for the Red Cross (ICRC). For example, CARE has been given the responsibility for providing and servicing supplementary high nutrition feeding stations in three refugee camps and has already assigned experienced CARE workers from other countries. These include Brian Wolff of Edmonton, Assistant Country Director in Kenya, who spent three years with CUSO in Thailand and speaks the language fluently.

Besides shipments of donated foods and medicines, CARE has provided 400 hospital cots and three *CARE MEDICO* vans for the IRC Ward at Sa Kaeo camp. Nurse Marge Dollack of Peterborough, Ontario arrived there from Afghanistan, October 24th and after working for 16 hours a day for weeks has sent a tape recorded message in which she describes the appalling state of the mothers and children racked with

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Thousands of Cambodian refugees
need food and medicine

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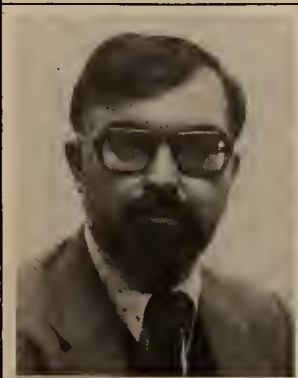
Professional Institute
of the Public Service

Jack Donegani

One area of concern is that of the arbitrary cutbacks in the public service which were made by the previous Liberal government. Departments were ordered to cut their budgets by approximately ten per cent in order to achieve the \$2.5 billion cuts announced by them in late 1978. The problem with making across the board cuts, as they were proposing, is that it usually cripples the scientific departments — the smaller departments — rather than the larger transfer payment departments which can normally absorb such cuts. Cuts of that nature in small departments dealing with scientific programmes means that whole projects frequently have to be cut, people with several years of expertise are put on lay-off lists, and you lose the ability to respond swiftly to emerging problems, such as the effect of fluorocarbons on the ozone layer. We feel that the public service is over-managed — a situation which is exacerbated when you have cuts coming from the top down because it is never the administrative sector which is cut but always the working scientific areas.

As a result of the previous Liberal cuts, 110 professionals were laid off. Despite the Conservative commitment to reduce the public service by 60,000 jobs, there is no evidence of people in the professions losing their jobs. Their approach was more logical because they attempted to trim the organization by going through a process similar to the development of the budget that is, from the bottom up rather than imposing a quota for cuts as the Liberals did.

There were a few dramatic reversals from Liberal cuts, such as the Petawawa Forestry Research Station, and the weather ship off the B.C. coast whose absence would have jeopardized the safety of fishermen, but we are fearful that we may again revert to in-



Back in the saddle again....

Will new Grit gov't walk softly, carry a big stick, or go back to sleep?

By Jill Greenwell

A vague but unmistakable feeling of déj vu is beginning to spread in Ottawa as the born-again Liberals and the lobbyists pick up where they left off a year ago. Some of the players are different but the issues are the same.

The big question is: will the Liberals emerge as a revitalized government or simply the same old one with a bad face-lift? To get some reaction to the election, we asked the representatives of a number of organizations to give us their views on how the new government is likely to affect their members' hopes and concerns during the next few years. The majority of these organizations belong to a consortium which meets regularly to exchange information and collaborate on lobbying.

Many of the questions raised during these interviews may well be answered by the time we go to press, but they nevertheless remain cogent concerns.

discriminate cuts of that type.

The government's emphasis on contracting out research is we think a deceptive way of encouraging the private sector to undertake this type of work. Our frontline government scientists are being forced to become contract administrators instead of being able to devote more time to research. The Canadian government is frequently the prime customer of many of the small companies who bid for these contracts, particularly in the engineering field, and in the end government expenditures are not really being reduced.

Bill C-22 which the Liberals hinted they may reintroduce, would have tampered with the collective bargaining process in the public service and called for salary cut-offs beyond which certain employees would not be covered by collective agreements. We

would like to see collective bargaining in the public service resemble that in the private sector. Treasury Board's responsibility to reduce government expenditures is we believe in conflict with its responsibility as an employer to maintain moral, efficiency and the quality of work life. We would like some other public agency to act as the representative of the government in negotiations and we will be suggesting that the new government review the present structure. One of the problems in the public service is that members of Parliament, and even Cabinet ministers, are surprisingly naive about what goes on in departments. PIPS hopes to cultivate relations with all parties so that there can be informed discussion at caucus meetings and elsewhere on the role public servants play in the government of this country.

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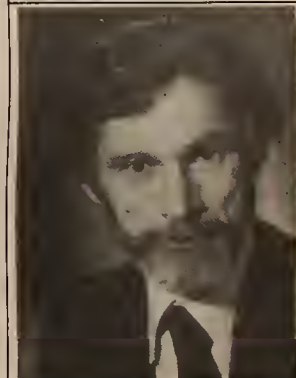
SCITEC

Rene Levesque

It is still very early to tell, but I am fearful that the old policies that Trudeau adopted in the ten years he was in power will return. I am not convinced that the Liberals are really interested in scientific research, although the previous Liberal government had, towards the end of its mandate announced a commitment to increase scientific spending to 1.5 per cent of the GNP. We will have to wait and see whether that move was a political one or whether it was based on a strong conviction of the need for more scientific research. A good indication of the government's seriousness will depend on who is named to the Science and Technology portfolio — whether it will be a senior minister and also whether he will be responsible exclusively for MOSST or have additional responsibilities in the Cabinet.

It is important to view R & D in the context of an industrial strategy — in fact as the basis of an industrial policy which, by the way, we have not had in the past. It is critical to have basic research in all fields, and that includes medicine and the social sciences, because of its bearing on future economic and industrial policies.

It is also clear that the growth of R & D and our future economic and industrial development depends on the availability of qualified manpower. These people will have to be trained in universities. The federal government, which is responsible in large part for research in this country, and which has the enormous resources which will be required, must work in concert with the provinces to ensure that the funds are available to the universities. However, it is important to recognize at the same time that this is a problem which must be solved jointly, with all the flexibility that is possible since each province has its own criteria. The federal government must not impose its solutions on the provinces.



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LETTERS LETTRES

malaria and dysentery and severe malnutrition — three thousand patients in nine tents with hardly enough space for the nurses to move between them.

With 40,000 people already in the camps and another 360,000 expected to stagger in to Thailand by the end of the month, there is work for all the international agencies there and need for all the funds that can be collected to purchase appropriate food, clothing, medicines, shelter and transportation. CARE has already distributed 6000 basic need kits to those who have had to leave all their possessions behind and has delivered 45 tons of infant foods with another 80 tons on its way.

If readers would like to help, please send donations by cheque or money order to CARE Canada Fund for Cambodians, 1312 Bank Street, Ottawa K1S 5H7 or the agency of your choice.

Yours sincerely,
Thomas Kines,
National Director.
CARE

A certain narrowness

It is too late for the present election but may I point out a certain narrowness in the list of Federal ridings on page 13 of your February 1980 *Bulletin*.

The major part of the McGill downtown campus is indeed in Montréal-St. Jacques but the four co-ed residences remain in Montréal-Westmount whose member has been Donald Johnston (Lib.). Furthermore the Macdonald campus is in Vaudreuil whose Liberal member is Hal Herbert.

Yours truly,
Andrew Allen
Director
Public Relations Office
McGill University

Example of "yellow" journalism

I read with some sympathy the reaction of the university communities to the W5 program on foreign students. I did not see the program but my past experience with W5 left me little surprised at what happened.

Several years ago I was invited to discuss the question of fetal research on W5 in what was supposed to be a balanced presentation of opposing views. Dr. Harley Smyth and I spent considerable time and effort in Toronto being filmed for this. I was literally astounded when I watched the program since only a few minutes of the whole program was devoted to our presentation and in both cases the pictures and dialogue were certainly less than flattering. The result was an incredibly biased and distorted program which I gather is the trend for W5 programs. I was particularly disappointed and frustrated when after a series of correspondence with W5 they simply refused to admit any bias or that anything was wrong with their program in spite of the fact that our side of the question received something like twelve lines of dialogue out of 260 when I finally got the script to analyze it. My recommendation to your readers is simply to refuse to deal with W5 and this type of editing program unless you are absolutely sure that they are sympathetic to your viewpoint. The most frustrating part of this type of program of course is that there is really no recourse, no letters to the editor etc.

I have often thought that some of the examples of W5 programs such as these

should be presented to journalism schools as the worst examples of bias and inaccurate and distorted "yellow" journalism, as a teaching exercise.

Yours sincerely,
L.L. de Veber, M.D., F.R.C.P.(C)
Professor of Paediatrics
The University of Western Ontario
Director Haematology Oncology
War Memorial Children's Hospital

Brandon — a response

Canada and the whole world have lots of huge problems these days. In this context it is hard to understand why the affairs of Brandon University should merit a four page spread by Mr. Errol Black in the *CAUT Bulletin* of December 1979. Surely this is a minor tempest in a very small teapot.

Possibly not. Brandon's experiences may have lessons for other universities.

Perhaps the main function of a small university in a predominantly rural setting is to enrich the life of the surrounding community. The lecture podium, the concert platform, the extension programme, the science fair, and friendly personal relationships are more effective ways of doing this than the political soap-box. For over eighty years Brandon College and its continuation as a university have provided excellent teaching and also have earned the good will of all sections of the community. This has been most important in retaining the support of successive provincial governments despite a growing tendency to centralize educational and cultural resources in Winnipeg. But if the university becomes strident its credibility will be lessened, its effectiveness impaired, and its defences weakened.

Overt conflict has been averted so far, but tension there certainly is. Mr. Black has recounted some of the causes, but as a protagonist he finds it difficult to be objective.

Soon after the College became a University in 1967 both the faculty and the administration were badly shaken by the student unrest which was then fashionable. This led indirectly to a sort of see-saw activity between the administration and the academic staff, which has continued.

At one stage a concerned but perplexed Board of Governors acceded to faculty pressures to the extent of setting up a budget committee from which the President and the Comptroller were excluded; yet they were expected to be effective and convincing in negotiating for funds with the University Grants Commission. Surely this was a senseless arrangement. Its inevitable reversal coincided with the appointments of a new President and some new administrators who resolved to tighten up their control over both financial and academic policies, and were again supported by an acquiescent Board.

Again mistakes were made. Probably the most serious was the progressive downgrading of the role of the Senate, which should be the most responsible and democratic forum for academic considerations and related policy decisions in any university.

These developments caught most of the faculty off guard. Membership in the Faculty Association had declined as its influence dwindled, because it seemed to many an ineffective and over-expensive luxury. So when an issue that had been mishandled in the past came up, an active minority espoused it and set in train the events which led to the recognition of the Brandon University Faculty Association (BUFA) as a union and the officially recognized bargaining unit. This very critical decision was

Canadian Association of University Teachers

List of Censured University Administrations

The following university administrations are under the second stage of censure. At this stage the censure is advertised in the publications of faculty organizations in The United States, United Kingdom, Europe, Australia and New Zealand.

President and Board of Regents,
Memorial University of Newfoundland (1979)

Board of Governors
University of Calgary (1979)

Information about the events which led to censure may be obtained from:

The Executive Secretary
Canadian Association of University Teachers
75 Albert Street,
Ottawa, Ontario
K1P 5E7

made entirely by those who were active members at the time. Other faculty members, perhaps the majority, had no say and were effectively disenfranchised. As a result some of them found themselves compelled to become members of a union against their wishes and contrary to their personal convictions. The resentment persists. Many members of the faculty who could exert a moderate and pragmatic influence on the association's activities and pronouncements have not participated and still do not.

Thus the stage was set, with a new and over-eager administration and an untired union executive, for the process of collective bargaining. The BUFA team were mainly from the group who had spearheaded unionization and were out to prove their mettle. The administration team was largely made up of Deans and Directors who were a shade uncomfortable in their role as "unfroked academics" and overcompensated by posing as tough executives. Neither group was practised in the finesse of negotiation and diplomacy. Unwise things were said and written and these inevitably spread into the community. Tension and anxiety were palpable throughout the university as the negotiations continued interminably; nevertheless most of the staff simply went on making the university work, perhaps even more easily than usual while the negotiating groups played their little war games.

But in the end and to everyone's relief, a relatively sensible collective agreement was achieved. Now, unfortunately, there is a tendency to enshrine it as the epitome of human wisdom from which no deviation, however sensible, can be permitted. Both the administration and BUFA have taken this attitude when it has suited their purposes.

We now face the prospect of a second round of bargaining. It may be better this time, but Mr. Black's forecast is not reassuring. There is bound to be conflict so long as some people on both sides display

their conditioned reflexes and sound off their political prejudices, and expose the aces up their sleeves in a threatening manner.

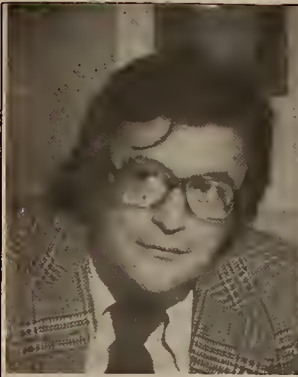
Of course there are many possible ways in which the university could be improved. The Senate should regain its influence and have much more responsibility for decisions about academic matters and major university policy. The Board of Governors should be enlarged to include more representatives both of Senate and of the non-academic staff to be better informed about what goes on where the action is. And perhaps it would be a good idea to establish a coffee room or a pub about half way between the offices of the University President and the Chairman of the Faculty Association, to encourage the sort of informal discussions which can often defuse confrontations before they happen.

Mr. Black and I are both somewhat prone to the use of clichés. But I must confess to concern that a colleague lumps together — in the same sentence and the same context — the two oldies "ivory tower" and "community of scholars". The first is, of course, the time-worn sneer of the Philistine. But the other, however much it has been prostituted, still represents for me the thought that a life spent in learning, and teaching, and investigating, and service, and clear honest thinking in communion with like-minded colleagues, is the best any human can hope for. But its privileges, to be honestly earned, demand responsibility.

D.B. Stewart
Zoology Department
Brandon University
Brandon, Manitoba
R7A 6A9

Professor Black replies

In his comments on my article —
"Brandon University: A Case Study" —



**Fédération des associations
de professeurs des
universités du Québec**

Jean Louis Roy

We heard so little about Liberal programmes and policies during the campaign that it is quite difficult to predict what may happen during the next few years. Future funding levels for scientific research may well depend on who Trudeau appoints as Minister of Science and Technology — whether that minister is convinced of the correlation between research and economic development and economic independence in this country, and even on his political

acumen. However, the Liberals did indicate that they favoured restraints in public spending, and it is possible that research may well be a victim of that restraint philosophy.

As far as Quebec is concerned, let us hope that the policies of confrontation which Trudeau conducted during his first 11 years will be influenced by the more rational and substantial negotiations which evolved between Clark and the Quebec government. During the seven months of the Clark administration, no minister except perhaps Parizeau was able to claim that we were victims of the system. For the first time they had access to secret documents previously withheld by the Liberals but which in many cases did not justify a "secret" classification. Discussions between officials were not always transformed into small politics. Even Clark's general approach towards the renewal of the federal system was encouragingly open instead of being based on the premise that the Prime Minister and Cabinet had exclusive responsibility for this. The Tremblay report, for example, would have been submitted to the House of Commons for discussion as well as the ten provincial governments in order to generate widespread debate and reaction from across the country.

I would not like to suggest that the new government is unlikely to be responsive to the need for more open government and greater access to information, but unfortunately we have created a kind of "parti unique" who think they can manage the business of the state without answering any questions, without having to explain any details of their decisions. I really think there will be less democratic debate as far as Quebec is concerned.

Writers' Union of Canada

June Callwood

The previous Liberal government was exerting considerable pressure on the Canada Council, particularly on the independence of the jury system, and also seemed to be moving towards a parallel funding body similar to the Canada Council which would be administered through the Secretary of State and therefore might be vulnerable to political influence. While the 1812 Committee was successful in persuading the Liberals to redress some of the cutback decisions in the culture sector, now that there is a majority government, there is less likelihood that the Committee will be able to function as effectively if the government wants to economize. We have no reason to believe either that the new government will be benign or understanding.

I think that the support for arts and culture in the next few years will depend on who becomes Secretary of State. Roberts was unfortunately not a person who seemed to have much influence on Cabinet decisions, and, perhaps as a consequence sympathy for some of our problems was never developed. David MacDonald, on the other hand, did an unusual amount of homework when he was Secretary of State. The Writers' Union had some concerns about him initially but began to see the long term benefits in some of his proposals. We liked the way he listened, and in particular, his support for the independence of the jury system.

We were also very pleased with Flynn who, surprisingly, instead of being rigid, was in fact more liberal than the Liberals. We are fearful that MacGuigan may become Justice Minister. He demonstrated that he was in favour of draconian obscenity legislation. It's not unlikely that the Liberals may reintroduce Bill C-21 again, and with him as Justice Minister it is much more likely that it would be reintroduced.



The future of book publishing in this country continues to be a concern. Except for the U.S. branch plants, Canadian publishers are having great difficulty staying in business, and a number of the small literary presses have gone under. The independent book publishers would benefit from a reorganized and updated distribution system. Postage rates, for example, should be lower. The chain bookstores have their own distribution system and therefore do not use the postal system, but the small bookstores have to pay on average between \$1 and \$2 to mail each book. The Secretary of State is funding a feasibility study on ways of alleviating the distribution problem but the recommendations may take two or three years to implement. In the meanwhile, the independent bookstores and little publishers are in mortal peril.

The Writers' Union would like to have the Copyright Act removed from the jurisdiction of the Department of Consumer and Corporate Affairs where there is a strong pro-consumer bias, to that of the Secretary of State where the emphasis is on the artists' interests.

**Association of Canadian
Television and Radio Artists**

Jack Gray

We have a number of major concerns. We are hopeful that the revisions to the Copyright Act will proceed quickly. We are equally concerned with the coming discussions on the future of broadcasting, including satellite transmission, pay TV, and the re-structuring of the system to increase the Canadian creative production capacity. These are critical matters in which both the Minister of Communications and Secretary of State will have a hand. We are also hoping that the immigration regulations will be amended in order to clarify which foreign performers can work in this country, and we will be interested in who receives that portfolio. Another area of increasing interest is that of freelance talent and the organization of bargaining units. A battle with long-term implications is shaping up in Quebec where the CBC French network has challenged the jurisdiction of existing units. The Canada Labour Relations Board, which is holding hearings on the problem, is threatening to reorganize units to include freelance people and disrupt existing collective agreements. Whatever their decision, it is likely to have widespread influence on industrial bargaining.

We are alarmed at the attitudes of officials in Consumer and Corporate Affairs whose sympathies are oriented towards the consumers' needs rather than the interests of creative people. Copyright can be used as a whipping boy for so many things, but we regard it as a method of assuring the creator of a minimum return on their work and providing a minimum protection — both moral, that is the form and content, as well as economic. That sort of protection is particularly important since our market is an export one, and it becomes a critical issue in the production of films, TV programming, records and books. Technological changes are coming so rapidly that we desperately need amendments to the present Copyright



Act.

One of the things that can be said of the whole Conservative period is that we had a superb Secretary of State, and that we were beginning to make some progress. We did not necessarily agree with everything he proposed, but he was concerned and could be trusted. Bringing the responsibilities for Communications and Secretary of State together was, we think, sensible and we hope the Liberals will continue that arrangement. An examination of the structure of broadcasting and the distribution system is underway and we hope that the initiatives started during the MacDonald tenancy will be further developed. This is an opportune moment to re-examine the structure of the Canadian production industry, including films, broadcasting and related aspects. It may take a decade to implement those policies but this is the time to set the future direction.

We hope as well that the new government will change the capital cost allowance provisions for film production. At the moment, they are full of loopholes and are not fulfilling their objective of encouraging the use of Canadian creative talent in the production of films in this country.

Canadian Medical Association

Doug Geekie

Number one on our priority list will be to determine whether some of the statements made by a couple of the candidates, in particular by Monique Bégin, about health care insurance, physicians opting out and provincial use of federal health care funds, represent party policy and are issues on which the government will act. During the campaign, Bégin spoke in favour of forcing the provinces to match federal monies for health care and said that the provinces had been niggardly in their settlements for physicians' fees, and that was why they were opting out and billing patients. She suggested that the provinces should give doctors a fair deal for their services and that having done so, they should not be allowed to opt out or bill patients in excess of the provincial schedule — not unlike the system in Quebec. CMA feels that without the right to bill patients, medicare becomes in effect a state of medical scheme where the doctor becomes an employee and responsible to the state rather than responsible to and an advocate for the patient. We believe that in the long term that would not provide Canadians with the health care system they require, and we would not be happy if that were forced on us by the government. We will be submitting a brief to the national review being conducted by Emmett Hall, and will raise, among other things, the issue of the provinces not living up to their end of the funding agreement.

Another major area of concern is that of



funding for the Medical Research Council. The previous Liberal government had devised a five year funding formula for the Council, and while we were pleased with the proposal to institute some form of stable long-term funding, that particular formula under-estimated the real impact of inflation on scientific research. With the change to a Conservative government, that formula was replaced with a five year development plan in which the MRC's budget for the first year of the plan was increased by more than 17 per cent instead of the 13 per cent predicted by the Liberal formula. Future funding for that Council will of course depend on Liberal priorities but we believe that it would be a retrograde step if the new government allocates less than the Conservatives had promised.

Association of Universities
and Colleges of Canada

Alan Earp

It is perhaps a little early to assess the impact the new government will have on our members. However, I suppose we should be seriously concerned because the record of the previous Liberal government was not up to expectations — although we hope that this one will be somewhat better. We would like to feel that the progress we had achieved under the Conservatives for increased R & D funding will not be jeopardized, and that the new government will not move in the opposite direction, despite its past record. It would certainly be difficult, I think, for the Liberals to renege on the Conservative commitment to the R & D funding levels announced just prior to the election.

Another major concern is that of the "creeping provincialization" which was characteristic under the previous Liberal regime and which did not receive much discouragement under the Conservatives. We would certainly support the notion that provincial governments should be obliged to spend the federal funds they receive for post-secondary education in this area. Perhaps what is needed is fairly clear documentation about what has been happening since the renegotiation of the Established Programmes Financing agreement, and the degree to which the funds have not reached the sector for which they were originally intended. I believe there is a fair amount of work to be done in publicizing the dimensions of this problem.

One of the things that we will be looking at in any case is the constitutional position of the universities in the 1980s. We have tended tacitly to sit back and accept the contention that this is a purely provincial matter, but this is clearly an issue which needs review. There is, I think, a case to be made for those who argue that the electorate favours a strong central government and that one of the components of a centralist structure is higher education.

I am concerned about the difficulties being faced by foreign students and the numbers of obstacles being placed between



countries at the higher education level. It will become increasingly difficult for universities to avoid being affected by the parochial attitudes which are becoming prevalent. The WS programme was merely a manifestation of some of those social attitudes.

I am, up to a point, sympathetic to the notion of our "selling" our educational resources by attracting foreign students to this country but I would be very concerned about our dealing only exclusively with those from oil-rich countries who can pay the price tag. We have already lost many of the traditional students from certain parts of the world which I think is regrettable since this country gained a lot from their being here. There may be a need, therefore, for the federal government to play a more prominent role in supporting foreign student education in this country as part of Canada's foreign aid programme.

I think there is an increasing role for AUCC as a lobby. Certainly our experience on the R & D issue has been reasonably encouraging, and we have the support of most of our institutions who regard this as an important function, and perhaps one we have not done very well in the past.

(Ed. An error-filled CTV documentary alleging a takeover of Canadian universities by Chinese students).



National Union of Students

Morna Ballantyne

We are not optimistic that the new government will respond to students' concerns — partly because it is a majority government and therefore not as susceptible to the views of the opposition or to interest groups such as ours.

During the recent election campaign, the Liberals promised that they would attempt to have one NUS representative appointed to the federal-provincial task force on student assistance, but the terms of reference and composition of that body were announced just prior to the election, and we feel there is little prospect now of their promise being fulfilled. Nor is there much hope that the Liberals will make any changes to the Canada Student Loan Plan. The plan is badly in need of amendment and it continues to be one of our major concerns.

We are optimistic, however, about future student employment plans. Under the Conservatives, the wage levels for the Summer Youth Employment Programme would have been dependent on the respective provincial minimum wage. Students in Saskatchewan, for example, would be paid \$3.50 an hour while those in Newfoundland would receive only \$2.65 per hour. The NUS had urged that as a federal programme, students should be paid the minimum federal wage, and we are hoping that the Liberals will make those changes to

the programme. We are also hoping to have some influence on the development of the Liberal's youth employment strategy which is a year-round employment programme.

As far as the funding of post-secondary education is concerned, we are still attempting to have the EPF agreement changed in order to ensure that the provinces spent those funds in the area for which they were originally intended. The NUS will, in collaboration with other groups, continue to pressure both the federal and provincial governments for changes to the present agreement.

CAUT

Donald Savage



We believe that there are a number of short and long term matters which the new government will have to address in the next few years. In the short term, we need a full-time Minister of Science and Technology. The CAUT has lobbied in the few days since the election to ensure that, and it seems to me that whether or not we have such a full-time appointee will be symbolic of how seriously the government regards research and development. CAUT members will also be very interested to know whether the government intends to maintain the proposed budgets of the three granting councils announced by the Conservatives (Medical Research Council \$82.2 million, Natural Sciences and Engineering Research Council \$162.6 million and the Social Sciences and Humanities Research Council \$41.7 million) and whether or not they will maintain the two five year plans already announced for NSERC and SSHRC.

We hope that they will introduce freedom of information legislation with effective non-ministerial review. Trudeau seemed to be moving in that direction during the campaign. The government will also have to consider whether it will accept the recent recommendations of the Tariff Board to impose import duties on a large number of items currently imported duty-free by Canadian universities. They have at the same time also proposed an unnecessarily complex system for administering these new regulations which would result in our universities having to pay far more than they are now doing. The AUCC has already protested this and CAUT hopes that the universities, which do a great deal of Canada's research, are not penalized, not subject to ridiculous bureaucratic regulations.

In the long term, the fate of the universities will of course be caught up in whatever proposals are made for the funding of constitutional changes, and in particular, the fate of the existing \$2.7 billion spent on post-secondary education in tax transfers and cash. The university community will want to be consulted before the Liberal government makes any new proposals, as they promised to do so during the election campaign (see *CAUT Bulletin*, February 1980), and we will want to be assured that adequate funds for post-secondary education will still be available whatever the constitutional rearrangements. We believe the government will have to consider its reaction to the Croll

report and the abolition of the mandatory age of retirement (see *CAUT Bulletin*, May 1979 for details of CAUT's position), and its response to the Adams Commission on Education Leave and Productivity. We hope that it will seriously consider the recommendations put forward by the Adams Commission and CAUT to increase access to university education by establishing a Registered Educational Leave Plan which would allow Canadians to save \$2,500 tax free each year. The new government will have to consider the report of the McDonald Commission. Past experience does not suggest that the Trudeau government will take a position consistent with those interested in civil liberties unless a great deal of pressure is applied. The CAUT has also been urging the government to amend the Income Tax Act in order to encourage more research within the university sector and will continue to do so (see page 14 this issue).

But perhaps one of the issues of greatest concern to the CAUT is the growing evidence that all the funds transferred by the federal government to the provinces for post-secondary education and health are not being spent by the provincial governments on these areas. We think it is important for the government to recognize that a great deal of the basic and applied research in Canada is undertaken by university professors and that universities will have to be funded at a far higher level than they have during the last few years if we are to continue to supply the research and the highly qualified manpower which will be required in the new government's industrial development strategy.

Chemical Institute of Canada

T.H. Glynn Michael

The most striking thing about the election and consequently the way it will affect people is that we have, for the first time in a long time, a majority government which should be capable of putting its policies into practice more readily and directly than has been possible for a number of years. While the Liberals made no definitive statements during the campaign, I would like to think that they realize the importance of a strong economy and that a strong economy depends on the strength and appropriate use of technology, which in turn depends on an active scientific community.

I am guardedly hopeful that the support for science and technology received during the past year will continue. It may be difficult to achieve the goal of 1.5 per cent of GNP by 1985, and perhaps impossible to meet the Conservative objective of 2.5 per cent by that year, but I think the future strength of R & D funding will depend to a large extent on who becomes Ministers of Science and Technology and Industry. The



CIC canvassed political candidates last May, about R & D issues, as did a number of groups, and decided to repeat that exercise because of the abysmal knowledge of the politicians. We will continue to stress the need for support for R & D in this country.

MOSST to fund study of bio- medical technology

By Donald C. Savage

The Ministry of State for Science and Technology (MOSST) is initiating a study on the Canadian potential in the area of bio-technology so that the government can decide whether or not it wishes to fund the development of a bio-technology industry in Canada and, if so, how this might best be done.

In an interview with the *CAUT Bulletin*, Dr. Lewis A. Slotin of the Ministry, pointed out that most of the industrial powers have significant projects in this area. In Japan, for instance, such industries produce 5 per cent of the GNP, notably but not exclusively in dietary supplements. In the EEC, a joint venture is being undertaken in pollution control and biotechnological research. The Carter administration in the United States has placed considerable emphasis on the production of ethanol for gasoline. Although there are promising individual developments in Canada, Dr. Slotin indicated that there has not been sufficient focus or funding for Canada to become a significant part of this international development. Hence the decision by MOSST to fund this study. In addition, MOSST hopes that the study will bring together researchers in the government, the universities and private industry so there might be more co-operation between the three areas.

Dr. Slotin pointed out that there were three general areas of research:

1) Fermentation. The techniques, of course, have long been used in brewing and baking but new applications are being developed in Saskatchewan and Ontario.

2) Enzyme technology or the use of the catalytic ability of an enzyme. A notable example is waste control. The dairy industry, for instance, saves considerable sums of money by converting waste dairy products into feed stock and protein supplements. One of the virtues of this process is that it usually can be carried out at room temperature and at standard pressures so that energy does not have to be used in large quantities to produce results.

3) Genetic and cellular manipulation. The best known and most controversial area is recombinant DNA. It is hoped that research in this area can be used to attack oil spills and in the production of ethanol.

There are several new features to this MOSST programme. Dr. Slotin stated that research and development involved two possibilities — the application of existing technology to new problems as a consequence of rising costs, for instance, of fossil fuel, and new developments in basic research and its application. Dr. Slotin also indicated that the project would be entirely funded by MOSST and, if it proved useful, the technique might be applied to other areas of applied science and technology. However, he stressed that the role of MOSST in this project was one of facilitation, not of control. Built into the process was widespread consultation. MOSST has been talking about the project with the granting agencies, the learned societies (such as the Biological Council of Canada and the Canadian Association of Physicists), the federations (such as the Canadian Federation of Biological Societies), government departments and private companies. Through these organizations, MOSST expected to reach most of the active researchers in the field. This phase of the study was meant to be in the form of a catalogue rather than an evaluative study of each programme. The hope is to complete this section sometime in April.

The second phase will involve a series of workshops probably in Ottawa, funded by MOSST, to bring those involved together for further discussion. This phase will involve scientific and engineering experts along with economists. The purpose of the meetings will be to explore, on the basis of the data collected by MOSST, whether or not this was a promising area of development in Canada and if so, what means should be used to develop it: taxation incentives, contracting out, support through the granting councils for basic research and manpower training, the use of the facilities of the National Research Council or of its programme for industrial development, etc. Would it, for instance, be a good idea to emulate the success of the interdepartmental committee on space technology and create one in the area of bio-technology? But the overall question will remain — is it possible for Canada to become a player in this industry or merely a spectator?

The third phase will involve a report by MOSST and a recommendation to the federal cabinet. Dr. Slotin stressed that his report on phases one and two will be sent to all the participants for comment and will be a public document before any decision is made by the cabinet. The only papers which will not be made public will be the actual cabinet documentation. It is clear that MOSST is putting great emphasis on its desire for openness and consultation in this process — a development which can only be welcomed by the academic community.

Dr. Slotin also emphasized that MOSST was concerned about the ethical problems and risk hazards in this type of research. Arguments over the possible perils involved in recombinant DNA research have been widespread, the most publicized being the confrontation at Harvard University. This in turn has led to the creation of guidelines in most countries (such as the rules of the Medical Research Council in Canada). Equally important risk questions arise with the development of biological insecticide. Experience elsewhere suggests that watchdogs frequently stop watchdogging and become agents for the industries they are supposed to control. Could this happen in bio-technology? Dr. Slotin indicated that he intends to build discussions of risk assessment into phase two of the MOSST study.

Others have been concerned about the ethics of genetic manipulation and this, too, will be a part of the MOSST study. The University of Western Ontario, for instance, has an ongoing programme in bio-ethics.

Dr. Slotin stated that a number of the provinces have shown a specific interest in bio-technology. The most notable of these is Alberta where the Alberta Research Council has indicated that this is one of its major concerns in terms of long-range planning. In Saskatchewan and Manitoba, there has been a particular concern about the production of gasoline to reduce the fuel costs of farming. Last October, a joint Quebec-France colloquium on energy from biomass was held in Quebec.

Dr. Slotin is interested in hearing from those involved and interested in this field, particularly those who might have been missed in the first process of consultation. His address is: Dr. Lewis A. Slotin, Policy Advisor, Projects Division, University Branch, Ministry of State for Science and Technology, 270 Albert Street, Ottawa, K1A 1A1.

Dr. Savage is Executive Secretary of the CAUT.

Department of Mathematical Sciences

The Department of Mathematical Sciences is seeking two Associate Professors; Ph.D. in Computer Science or equivalent, to participate in developing four year programme. Salary commensurate with experience. Applications received until positions filled. Please send replies to:

Mr. Donald E. Ayre
Secretary of the University
Lakehead University
Thunder Bay, Ontario P7B 5E1

Lakehead University

Trudeau flip-flops on Canadian R&D

Prime Minister Trudeau is once again ignoring the long term need for the development of Canadian science and technology by dividing the responsibility of the Minister of State for Science and Technology (MOSST) with that of another Minister.

The appointment of John Roberts to the joint portfolios of Minister of Environment and Minister of State for Science and Technology is being viewed by members of the scientific and academic communities in Canada as a clear sign of the Prime Minister's indifference to the development of science and technology.

Dr. Robert Willes of the Canadian Federation of Biological Societies, which represents 3,600 senior Canadian scientists, terms the situation "deplorable".

"Without any reflection on Mr. Roberts himself, a part-time minister of Science and Technology is completely unacceptable and contrasts markedly to the significant attention given the MOSST by the Clark government," Dr. Willes said.

Dr. Willes pointed out "that Canada's gross expenditure on research and development (GERD) has declined from 1.29% of our gross national product (GNP) in 1967 to 0.94% in 1978. Based on the performance of competitive industrial nations in

the world today, and on the analysis of economic and industrial experts, Canada must invest in the order of 2.0% of our GNP on Research and Development (R & D) if we are to regain our competitive status in international trade.

"This goal cannot be attained with a part-time effort", Dr. Willes emphasized.

Dr. Donald C. Savage, Executive Secretary of the Canadian Association of University Teachers, said that the CAUT "as well as many faculty associations plus Canadian scientists in industry and universities urged Mr. Trudeau immediately following the February 18 election to ensure the MOSST was a portfolio without other ministerial responsibilities.

"This would allow the minister to devote his time to solving problems of Canada's poor performance in industrial R & D, the continual erosion of our university research base and the crisis in the supply of highly qualified manpower for research which is predicted for the late 1980s", said Dr. Savage.

Dr. Savage said that he hoped the Prime Minister would change his mind and relieve the minister in charge of science and technology of all other ministerial responsibilities.

SCHOOL OF ENGINEERING

The School of Engineering invites applications for a faculty position from Civil Engineers with expertise in water resources, hydraulics, and hydrology. Candidates should have a Ph.D. Industrial experience and research activity are desired.

Duties will include teaching undergraduate courses and research. Salary and rank will be determined by qualifications and experience. Please submit applications with the names of three referees to:

Mr. Donald E. Ayre
Secretary of the University
Lakehead University
THUNDER BAY, Ontario P7B 5E1.

Lakehead University



University of Toronto Faculty of Forestry

The Faculty is seeking applicants for a contractually limited term appointment in forest resources management in the area of timber management and outdoor recreation.

Duties include teaching of undergraduate and graduate courses, the supervision of graduate students and the initiation and pursuit of research. Of particular importance is the teaching of an integrated course in the planning of forest management operations for timber production and outdoor recreation. Qualifications required: An advanced degree in forestry, preferably a Ph.D. or equivalent in experience.

Condition of appointment: A two-year initial appointment at Assistant Professor level with possible advancement and reappointment for three years, one month annual vacation and moving allowance to Toronto.

Salary: Commensurate with qualifications and experience.

Date of Appointment: Effective 1 July 1980.

Closing Date: When position is filled.

Applicants should provide a curriculum vitae and should arrange for three letters of reference to be provided by referees familiar with the applicant's capabilities.

Application material and/or requests for further information should be directed to: Chairman of the Search Committee, Faculty of Forestry, University of Toronto, 203 College Street, Toronto, Ontario M5S 1A1.

University of British Columbia Department of Animal Science

Applications are invited for the position of Assistant Professor in the Department of Animal Science, University of British Columbia. Candidates must hold the Ph.D. degree, and be eligible for membership in the British Columbia Institute of Agrologists. Post-graduate training and experience in the area of beef cattle nutrition is essential. Background in the animal aspects of range management, and in systems modelling, would be highly desirable.

The successful candidate will be expected to participate in the teaching of undergraduate and graduate courses, to undertake research in the beef cattle producing areas of interior British Columbia, and to participate in the on-campus beef cattle research program.

Applications, including curriculum vitae, and the names of three referees should be sent to:

Dr. B.D. Owen, Chairmen
Department of Animal Science
Faculty of Agricultural Sciences
The University of British Columbia
Suite 248, 2357 Main Mall
Vancouver, British Columbia V6T 2A2.

The University of British Columbia offers equal opportunity of employment to qualified male or female candidates.

Canadian Federation of Biological Societies

John Cowan

The most central issue for our members is the funding and planning of research in Canada. The previous Liberal government had almost but not quite, managed to sink Canadian research by reducing funding and delaying planning for research for so long that the matter had reached crisis proportions when the Conservatives were elected. The Conservative government seems to have brought about dramatic improvement in the stability and funding for the extramural granting councils but had produced relatively little change from the previous doldrums for scientific activities within the government or in the private sector.

The first and best indicator of whether the new Liberal majority government maintains its former backward posture will be whether or not it confirms and extrapolates the improvements with respect to the granting councils brought in by the Conservatives. I am personally not encouraged. The year before the election of May 1979, the former Trudeau government had announced a massive new science programme which had as its primary goal raising Canadian effort in research and development to 1.5 per cent of the GDP by 1983. In the year between that announcement and the defeat of the Trudeau government, the situation worsened rather than improved.

I am also fearful of the effect of majority government; since both opposition parties are well informed now on R & D issues, a minority government would probably have reflected an R & D stance which would have been a sort of fusion of all three views. This is not now possible. It is of course possible that the popularity of the R & D issue may by now have communicated itself to the Liberals. If this change has actually taken place, it ought to be evident within at most a couple of months. In addition to granting council budgets, good indicators would be the appropriateness of the following ministerial appointments: MOSST, Health and Welfare, Secretary of State, as well as at least token implementation of the first stages of the "Buchanan plan" of June 1978. Thus by the time you readers see this in print, they should know, using these indicators, which way the new government has gone.

On other issues, as well as on research, it

is difficult to make serious predictions without the benefit of having seen a platform from the party which was elected. I hope that the new government is more successful than the Conservative government and the previous Liberal government in re-arranging the shared financing of higher education and research with the provinces. The situation over the past five years has been simply that the federal government still pays the greatest portion of the bills indirectly but has lost any ability to compel the provinces to genuinely match funding, resulting in a real decline in the resources available to universities and research institutions. We must bear in mind that Canada has no real system of research institutions separate from universities, except for the NRC, and so if Canadian universities are in trouble, Canadian research is in trouble.

If the election campaign is to be believed, Mr. Trudeau intends to turn FIRA into a fire-breathing dragon, which, among other things, may finally compel multi-nationals to carry out significant amounts of research in Canada. This would probably be the only way in which we could even begin to bring the private sector component of R & D into line with that of other developed nations. On the other hand, Mr. Trudeau did create FIRA and there is relatively little evidence that in its previous existence it was able to perform this function. I do not doubt that some fairly simple legislative changes would give it the appropriate authority (some tax changes may be necessary as well), but I suspect that its staff has fallen into such a pattern of saying "Yeah. Okay" that they would probably all have to be replaced.

ACCESS: A Canadian Committee for the Public

Right to Information

Jim Feeley

Last summer, a public survey found that over 50 per cent of those canvassed wanted a strong freedom of information act with some form of judicial or independent review. However, with the election of a Liberal majority, the other parties will not have the leverage they need to ensure that we get such an act. The bill the Conservatives introduced last fall, despite a few flaws, was basically a good one, but freedom of information is not one of the Liberal priorities. The new Prime Minister has always opposed judicial review and supported ministerial review. But as far as we are concerned, ministerial review really means ministerial control. In fact, we would

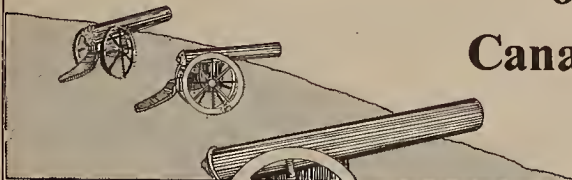
prefer to have some form of parliamentary control rather than a system which relies on a minister's discretion.

A few Liberal MPs, such as Jean Luc Pepin and Lloyd Axworthy, came out publicly in support of judicial review during the election campaign, and if the Liberals were to allow a free vote on any FOI bill they bring in, we might get some additional Liberal support for the principle of judicial review, but if not, any rebellious Liberals would probably be disciplined. One of the drawbacks of course of not having a federal freedom of information act is that the provinces will continue to go slow in bringing in similar legislation. In the meantime, information on critical areas such as federal-provincial relations where billions of dollars are involved, will continue to be cloaked in secrecy. If the Liberals bring down an act without judicial review, ACCESS will lobby strongly against it. We are not going to continue to meet with MPs but, in the final analysis, we are not optimistic.

National Conference on Policy of Strategic
Research Grants

Strategic granting programs: a boom or a bust for Canadian research?

By Robert Willes



Graphic — Tom McDonald

Canadian researchers from the medical, physical, biological and human sciences gathered together in Ottawa recently to explore government policy in an area vital to all: the strategic, or thematic, research granting programs.

The setting was the National Conference on the Policy of Strategic Research Grants held at the University of Ottawa on January 31 and February 1. The Conference was organized by the Social Science Federation of Canada, with support from members of an Ottawa-based consortium of research lobby groups, including the Canadian Association of Physicists (CAP), the Canadian Association of University Teachers and the Canadian Federation of Biological Societies (CFBS). The University of Ottawa generously donated its facilities for the conference.

The three federal granting councils — the Natural Sciences and Engineering Research Council (NSERC), the Medical Research Council (MRC), and the Social Sciences and Humanities Research Council (SSHRC) — have either proposed or already implemented strategic granting programs in what are considered areas of national concern. This policy of the granting councils has created a great deal of concern and stimulated much discussion within the university community from a variety of perspectives: the basic philosophy of strategic or thematic grants, the appearance of the government directing research, the mechanisms of administering the grants, the effectiveness of the programs and the choice of the national areas of concern. The Ottawa conference was organized to provide an open forum for discussion and the exchange of ideas between the research community and government officials in these key areas.

A provocative introduction to the conference was delivered by Dr. John Trent, Executive Director of the Social Sciences Federation of Canada. Dr. Trent's address, entitled "Federal Policy of University Research: A Trojan Horse...?", set the goal for the entire conference: a better understanding of what the SSHRC means by thematic research, the NSERC by strategic research and the Ministry of State for Science and Technology by concerted research. The conferees were to "examine the effectiveness of these policies, the mechanisms of communication of the program's objectives and results and to explore the alternatives to the present policy that would be of greater benefit to governments, researchers and society".

MOSST and granting councils speak out

Representatives of the Ministry of State for Science and Technology (MOSST) and

the three granting councils presented their reasoning and philosophy in the development of strategic research grants policy.

Dr. David Low of MOSST presented an overview of the government's general position on research support and general R&D policy. Dr. Low obviously could not resist the policies of the occasion and summarized a January 31, 1980 press release from Mr. H. Grafty, Minister of State for Science and Technology. The announcement promises to further increase the 1980-81 budgets of NSERC to \$162.6 million for 1980-81 (35% higher than 1979-80); of SSHRC to \$41.7 million (a 16.2% increase over 1979-80) and of MRC to \$82.2 million (a 17.4% increase over 1979-80). Dr. Low failed to indicate the status of these announced funding increases for the three granting councils should the Conservative Party not win the current election!!!

Dr. Low stressed that the concept of concerted research is a government policy which developed based on Canada's limited resource in any total R & D effort. The concept is based on the adage of concentrating effort in areas of strength and priority. Dr. Low attempted to assure the conferees that areas of strength and priority have been and would continue to be developed through consultation between governments and universities although many present questioned the effectiveness of this consultation.

Dr. Gilles Julien, Executive Director, NSERC, outlined the NSERC strategic grants program from its inception in 1977 to the present. Strategic grants were not particularly new to the natural sciences since NRC operated the negotiated-development grants program from 1967 to 1975.

Dr. Julien alluded to the somatic difficulties of bilingualism. For example, the NSERC concerted research program is termed "strategic grants program" in English and "des subventions de recherche thématique" in French because of the different connotations of the words "thématique" and "strategic" in the two languages.

Dr. Julien emphasized that the NSERC policy is to develop strategic programs in areas where the "critical mass of expertise" in Canada is sufficient to ensure a successful program. Consequently, programs were not initiated in some areas deemed a national priority by both the government and the scientific community.

The question of calibre of research supported by the NSERC strategic grants program is obviously of concern to NSERC. Dr. Julien presented data from the NSERC program over the past two years demonstrating that more strategic grants were awarded to researchers holding NSERC operating grants for free research

than non-recipients of operating grants and that the NSERC strategic grant recipients received higher ratings in their individual appraisal than those receiving general NSERC operating grants. From these data, Dr. Julien concluded that Canada's top researchers were applying for and receiving NSERC strategic grant funds.

Dr. John Nicholson, Executive Director, SSHRC, gave an enthusiastically presented, although not so enthusiastically received, account of the SSHRC thematic grants program. Since the SSHRC program had only begun, Dr. Nicholson stressed that only 12 thematic areas of concern had been defined. In contrast to the NSERC program, SSHRC does not have a policy of restricting strategic areas to those with a critical mass of expertise in Canada. In fact, Dr. Nicholson stated that SSHRC was, in some cases, using the funding powers of the SSHRC thematic research program to stimulate research in areas which are of national concern and priority where Canada specifically lacks a critical mass of expertise. This SSHRC policy was, in this regard, exactly the opposite of the NSERC policy as stated by Dr. Julien. Perhaps the granting councils should consult more closely with each other to unify Canada's science policy in this area, or is that the job for MOSST?

Although Dr. Nicholson assured his audience that SSHRC had consulted intimately and often with the academic community in developing the themes for their concerted research programs, the conferees were informed that certain themes were developed by contractual arrangements with private consultants. Several conferees were critical of this procedure and questioned whether such procedures really reflect "consultation with the research community" on such important matters.

According to Dr. James Roxburgh, Director, Grants Program, MRC, the MRC has funded strategic or thematic programs since its inception, although these programs have masqueraded under "noms de plumes" such as project grants, areas of national concern and others. Such programs have been widely accepted in the medical sciences and have generally been very productive, said Dr. Roxburgh. The establishment of areas of medical research of genuine national concern has usually been determined by MRC committees made up of active representatives of the medical research community, although council itself makes the final decisions. The method of choosing representatives on such committees and the quality in representation was not addressed by Dr. Roxburgh.

The conferees respond

Following the opening session of com-

ments from MOSST, NSERC, SSHRC and MRC, there was an open discussion which continued and increased in intensity and conviction at a "cash bar", lasting into late evening. The major points arising from these discussions were many. The shortage predicted in research personnel was raised in light of a sustained increase in research budgets of granting councils at a time when provincial funding of universities are being cut back. All council representatives recognized the importance of training of research personnel. Dr. Julien emphasized the manpower training element of the NSERC 5-year plan and the ongoing consultation with the provinces to discuss this problem.

Similarly, Dr. Nicholson stated the SSHRC recognizes the manpower problem and emphasized the requirement for more frequent and more open consultation with government.

The major concerns voiced by the conferees during the plenary discussion related to the obvious need for frequent and open consultation with practising researchers in the selection of areas for concerted research and in the development of policies by MOSST and the granting councils.

The conference segregated into three workshops following the plenary session. These workshops focused on "Effectiveness", "Implementation", and "Alternatives" of the strategic (thematic) research grants concept.

"Effectiveness" workshop

The workshop chaired by Dr. J. Cowan, Vice-president of the Canadian Federation of Biological Societies, assessed the "effectiveness" of the strategic (thematic) grants programs. Since the SSHRC thematic grants program has not been completely implemented, the NSERC strategic grants program and the MRC areas of national concern were the major areas discussed.

1. A general opinion expressed was that there was not enough data to realistically assess whether or not the strategic grants programs really resolve problems of national concern. A number of conferees warned that the effectiveness of the strategic grants programs is dependent on the proper "mix" between support for "free" research versus strategic research. Free research must continue to advance in order to provide the basic information required to successfully resolve problems of national concern. The conferees recommended that, regardless of the directions of strategic grants programs, the support for free research, appropriately indexed, must not be allowed to decline. Also, there is a need to establish an appropriate upper limit of the ratio of strategic research to free

Guide to the Teaching Dossier Its Preparation and Use

This report, prepared by the Teaching Effectiveness Committee of the Canadian Association of University Teachers, is intended to aid in the development of faculty evaluation procedures in universities. It will be appearing as a special supplement in the May issue of the *CAUT Bulletin*.

research support and that the limit of the ratio needs to be established for each jurisdiction. It was recommended that there is a definite need for more independent retrospective study of effectiveness of strategic or thematic programs. Currently, all evidence of effectiveness is anecdotal. Assessment of effectiveness should address the quantity and quality of output and the confluence of the output of strategic programs with the originally stated objectives of the programs. The view was also expressed that the objectives of the programs must be more clearly defined and that this definition should be a joint function of the granting councils and the research community.

2. The conferees agreed that the strategic grants programs were effective in increasing public and political awareness of research, and, thereby, in encouraging politicians to allocate more funds to research. As well, the programs were also influential in creating increased international recognition of Canada's R & D efforts although effectiveness in this area was more difficult to judge at this time.

3. The conferees expressed considerable concern over the mechanisms of establishment of areas of national concern and the goals of the strategic programs. There is a definite need for wider representative consultation in the establishment of goals, for more cooperation amongst agencies and clearer dissemination of the outcome of these deliberations to the research community. One of the most appropriate vehicles for this consultation in each discipline is the learned societies composed of the practitioners of that discipline.

4. Conferees were critical of the numbers of strategic or thematic areas defined by the granting councils. There appears to be a difference in philosophy between councils. The NSERC develops strategic programs in areas of current national research strengths, indicating that NSERC believes a critical mass of expertise is required to produce a successful program. In fact, NSERC representatives stated that areas of national concern, such as forestry, have not been proposed in their strategy grants program because of the lack of a critical mass of expertise in Canada in this area. The SSHRC, on the other hand, has initiated thematic programs in areas lacking a critical mass of expertise (e.g., aging) because SSHRC believes work should proceed in these areas and funds would stimulate researchers to begin the work required. This policy was criticized by several conferees and the view was expressed that the number of strategic or thematic areas should be restricted initially, then slowly expanded as experience is gained in the operation and administration of the programs. The level of support in a particular area should be sufficient to allow reasonable progress to prevent serious fiscal limitations in getting programs initiated. Funding in initial stages to "gear-up" projects can be critical to the future success of the program.

The conferees concluded the workshop by agreeing that strategic programs were not inherently bad, however, we must actively defend against faddism, political interference in research, patronage and, most seriously, the creation of random uncertainties and fears within the research community due to inadequate consultation and communication.

"Implementation" workshop

At the workshop on "Implementation", the chairman, Dr. Peter Forsyth, President, Canadian Association of Physicians, proposed a six stage general model for implementing strategic (thematic) grants. In the first stage, the entire community would be invited to comment and make suggestions on areas designated by the three extramural granting councils for strategic (thematic) grants. A smaller group of "experts" formed as a result of these initial discussions (stage 2) would, together with representatives of the granting councils, formulate a "Plan of Attack" in stage 3. This would be followed by the publication and widespread distribution of a proposed plan for implementation, which in turn

could be modified to conform with any revisions suggested by industry, the university community and the federal and provincial governments. The resulting "scheme for implementation" could then be negotiated with the appropriate researchers and laboratories (stage 5) leading finally to stage 6 — a "co-ordinated program" for administering the designated strategic (thematic) grants area.

A key feature of this model, Dr. Forsyth pointed out, is the presence of a series of "feedback loops" which in theory ensures continuous monitoring and interdisciplinary validation at all levels of implementation. The costs of utilizing such a multi-stage program would be considerable, but participants agreed that this was justifiable and in the long run would be "cost-effective".

Several of the workshop participants suggested that since the implications of the proposed thematic grants for the social sciences and humanities are particularly complex and in some cases ambiguous, a national conference should be convened by the SSHRC to examine the effects of the thematic grants program on social sciences and humanities research in Canada.

Although the workshop decided not to endorse a specific scheme for implementing strategic (thematic) grants, several general recommendations were made:

1. NSERC, SSHRC and MRC should each consider all strategic (thematic) grants proposals submitted for consideration to any of the granting councils.
2. NSERC, SSHRC and MRC should pay the full direct costs of implementing and administering strategic (thematic) grants programs rather than rely on outside support.
3. The three federal extramural granting councils should be urged to make a major funding effort at the level of senior research associates and their support staff, both in terms of an immediate infusion of funds and as well in terms of 3-year to 5-year funding projections announced in advance.
4. The conference should urge the Minister of Federal-Provincial Relations to place the question of universities' funding in general and highly-qualified research manpower training and funding in particular, on the agenda of the upcoming First Ministers' Conference on Research and Development as an item of high priority.
5. The conference as a matter of pressing concern should urge the Council of Ministers of Education to meet with representatives of the Canadian scientific community, to examine current financial and manpower difficulties of the universities, with a view to ensuring that national goals for research and development are accompanied by commensurate increases in provincial support for the universities.

"Alternatives" workshop

The workshop on "Alternatives" was chaired by Dr. Vaira Vikis-Freibergs, President, Canadian Philosophical Society. If the participants in this workshop did not arrive at firm recommendations because it was felt the issues at hand were too complex and too important to be dealt with in the time available, they nonetheless covered a series of areas of concern that should be explored further.

1. Negotiated Grants: An Alternative...

The first major issue that was put forth for discussion was whether or not a negotiated grants program could constitute a viable alternative to the present thematic grants programs.

It was explained that NRC, NSERC's predecessor, had such a program from 1968 to 1975. That program was designed as a joint type long term support for interdisciplinary group research on major problems. However, this program was discontinued in 1975 because universities could no longer agree to long term commitments in a period of provincial cutbacks in university

funding.

Nonetheless, in 1975 the Canada Council, SSHRC's predecessor, initiated a program of negotiated grants which is still in existence. These are large grants of at least three to five years' duration given to help research teams undertake a complex research task. There are two main types of negotiated grants: program grants and major editorial grants. The program grants permit concerted research, often involving several disciplines, on an important issue such as the economics of natural resource management. The latter finance the preparation and publication of major scholarly documents such as collected works, dictionaries and atlases.

Negotiated grants and thematic grants thus appear to share certain key characteristics such as interdisciplinary research, concerted research on important issues, so that this avenue should be explored further.

2. Consultation: The process that never was...

There was widespread, if not unanimous, belief that there has been far too little and limited consultation on the part of the granting councils in the selection of priority areas of research. It was felt that sending letters to university presidents was quite insufficient because university administrators could hardly be considered as spokesmen for the research community. This lip-service consultation, which avoided to a great extent the learned societies, also tended to perpetuate the informal "old boys club".

It was felt that the means of consultation were essential elements in ensuring the scientific credibility and success of a program of concerted research. This meant the need to elaborate procedural guidelines for grass roots and even public participation in the selection of research priorities. This grass roots input would also ensure a proper formulation of the priority areas so as not to exclude certain segments of the scholarly community, as is the case at present for the humanities. The participation of the research community would also avoid the selection of "trendy" areas.

Finally, it was suggested that there is a need to develop mechanisms that could manage new proposals on an on-going basis.

3. Coordination

Any program of concerted research inevitably poses a problem of coordination. At the most general level of federal-provincial relations, it was asked what exactly was the role of the Canadian Committee on Financing of University Research (CCFUR) and to what extent it could effectively have a coordinating role.

The need for the coordination of research effort and needs amongst government departments was also expressed. A suggestion was made to the effect that the Ministry of State for Science and Technology (MOSTT) be given a stronger role in monitoring and coordinating intramural government research effort and needs.

As for the coordinating role of the ICCC between government and the granting coun-

cils, it was made clear that this committee, as in the case of MOSTT, had no statutory basis, but was established merely by an Order-in-Council.

Finally, it was deplored that in recent years government research contracts have gone mostly to the private sector. Due to this government policy, it was felt that university researchers wishing to do applied research have somewhat been disadvantaged since the granting councils have themselves privileged basic research.

4. National Advisory Council

A proposal which generated a fair amount of discussion was to create a national advisory council by the federal and provincial governments that would determine national research priorities and that could also monitor the projects.

It was of interest that, although the workshops were given the tasks of assessing concerted research policy from three different perspectives, they produced an amazing overlap of opinion.

First, considerable discussion occurred regarding the requirement for "strategic" programs and the success of such an approach. It was not clear whether previous experiences with similar programs in Canada or in other countries had been adequately evaluated prior to the implementation of strategic programs. If such an evaluation was completed, the conferees were not aware of it.

Second, all three workshops agreed unanimously that lack of adequate consultation with active researchers has led to tremendous mistrust and misunderstanding of the government's policies with respect to concerted research. The proposal of the "Effectiveness" workshop, that "one of the most appropriate vehicles for this consultation in each discipline is the learned societies composed of the practitioners of that discipline", would appear appropriate. Another concern expressed by several conferees is that the consultation process must begin early in the formulation of policy. The perceived attitude that government officials are the individuals "in the know" with respect to science policy and that government will determine what is best for the country's R & D efforts is not acceptable to the research community. Surely governments are expected to make decisions based on public needs, but the determination of what these needs are must come from the public, not government.

The conference clearly demonstrated a considerable concern and unanimity of opinion within the academic community regarding concerted research programs — where else in Canadian history have researchers in the natural and physical sciences, human sciences, and biomedical sciences voluntarily joined together to discuss anything? The real value of the conference can only be judged historically. It is hoped there will be enough "follow-through" to stimulate a change in Canada's R & D policies.

Dr. Willes is Executive Secretary for Science Policy for the Canadian Federation of Biological Societies.

The Science Council of Canada has recommended that the Association of Universities and Colleges of Canada and the Canadian Association of University Teachers collaborate on a major study on the magnitude and nature of the turnover of academic staff at universities.

In a recent report University Research in Jeopardy (SCC Report 31), the Council asked that the study, to be funded by the federal government, focus on impediments to mobility within the university sector as well as those between the university and other employment sectors.

In recommending the study, the Council underlined the particular challenge facing universities today to maintain the quality of teaching and research under conditions in which the total number of academic staff may have to be reduced due to declining enrollment, and when the number of retirements will be very small. The universities will have to concentrate on mechanisms for the turnover of faculty in order to secure a steady influx of competent young faculty members, the report stated.

The Council predicted "grave consequences for Canadian society as a whole" if the quality or relevance of teaching and research were allowed to decline.

"The complex scientific, technological, and economic problems of the future cannot be met using second-rate institutions to generate new concepts and to train the manpower required," the report said.

The Council also called upon the provincial governments and federal granting agencies to develop new approaches to maintain and improve the quality of teaching and research in Canadian universities.

The Science Council made the following specific recommendations:

1. The federal government should finance a major study, sponsored by the Association of Universities and Colleges of Canada, in collaboration with the Canadian Association of University Teachers, on the magnitude and nature of the turnover of academic staff in Canadian universities and the factors which encourage or inhibit turnover.

The absence of portability clauses in pensions is certainly one obstacle to turnover. Therefore,

2. It is incumbent on the universities to play an active role in investigating and promoting mechanisms for achieving pension portability.

To indicate concern for the maintenance of scholarship of the highest quality,

3. Universities should grant special status to outstandingly productive staff members upon retirement and encourage them to continue their work.

Many universities are coming to the realization that their resources are being drained through offering courses and programs that require specialized staff and expensive equipment or library holdings, but attract relatively small numbers of students. In the interests of good scholarship, as well as economy,

4. Inter-university transfers of staff and facilities should be undertaken whenever research and/or teaching in a specialized area falls below the critical mass for productive scholarship in a particular university.

Although universities have cooperated in the past, they will have to do so to a much greater extent in the future if the quality of teaching and research is to be preserved and improved. For example, there are seven major cities in Canada with two or more universities. It is strongly recommended that,

5. Universities in adjacent centres should make efforts to develop joint graduate programs in appropriate disciplines,

Science Council urges major study of faculty turnover

along the lines established by the Guelph-Waterloo Centre for Graduate Work in Chemistry.

Although in the past, provincial governments have depended largely on federal agencies to provide direct support for research, many areas of provincial concern and jurisdiction would benefit from a more active provincial role. It is therefore recommended that,

6. The provinces should consider establishing research chairs in their universities in disciplines or sub-disciplines with particular relevance to provincial responsibilities and priorities.

As enrollment declines, the ability of the universities to hire new staff will be reduced. However, the present age structure is such that about 30 per cent of the existing faculty will retire within a ten-year period, beginning in 1993.

7. To avoid lowering standards or having to hire large numbers of faculty from outside Canada, the provinces should make it possible for the universities to spread the acquisition of new faculty over several years, beginning well before 1993.

A major challenge for the new Natural Sciences and Engineering Research Council (NSERC) will be to develop methods for preserving and enhancing the quality of research that do not rely on the teaching requirements of the universities to provide competent young recruits.

8. NSERC should take immediate steps to establish a program of Research Associateships, analogous to the Scholarships of the Medical Research Council, awarded on a highly selective basis, and tenable in Canadian universities for up to five years.

Re-institution of the awarding of Career Investigatorships by MRC, or the adoption of such a policy by NSERC, is not recommended. However,

9. Both should monitor the situation as time goes on and be prepared to extend the period of tenure of MRC Scholarships and the proposed NSERC Research Associateships beyond five years, if this should appear to be necessary.

There has been, in Canada, a tendency to downgrade basic research and to encourage universities to re-direct their efforts toward tackling the practical problems of government and the private sector. Such a policy could be self-defeating in the long run.

10. The integrity of basic research in science and engineering in our universities must be preserved, but, in doing so, emphasis must be placed on mechanisms for achieving spin-off.

Present circumstances are accentuating the importance of establishing closer links between universities and the private sector.

In the applied sciences in particular, greater complementarity in research and improved mechanisms for achieving spin-off from university research are needed. A prerequisite is that applied scientists in universities gain first hand knowledge of the industrial sector. As a proven but little used method of accomplishing this objective,

11. The Natural Sciences and Engineering Research Council should take the steps necessary to expand its Senior Industrial Fellowship program by a factor of ten.

One of the main obstacles to the expansion of NSERC's Senior Industrial Fellowship program is the general negative attitude of the universities toward allowing their staff to gain practical industrial experience.

12. The universities should recognize that by encouraging their staff to spend a year in the private sector they will increase the potential of making significant contributions to industrial performance and, at the same time, stimulate the most important market for their graduates.

Although the private sector will undoubtedly become the most important outlet for highly qualified manpower in science and engineering, this development must be stimulated. The Industrial Postdoctoral Fellowships program of NSERC has been effective, but it lacks the necessary scope for reaching its optimum potential.

13. The Natural Sciences and Engineering Research Council should attempt to at least double the present size of its Industrial Postdoctoral Fellowships program through a campaign to expand the number and types of participating companies.



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Varty appointment ...p. 1

EMOFICO chairman since it would provide "the most credible possible working framework". He indicated that the cost would be underwritten by the province (though Dr. Varty is a permanent federal employee) and that Dr. Varty would "rely principally on his own professional judgment and initiative in carrying out this assignment, giving due consideration to the fact that his actions and interpretations will reflect the university's scientific and scholarly integrity". Subsequent events appear to support the view that the entitlement to academic freedom inherent in a faculty post has been used to lend credibility to a monitoring process already biased in favour of continued spraying. Significance is seen also in the fact that the costs of the Varty appointment are underwritten by Forest Protection Limited, the New Brunswick crown corporation responsible for the spraying program in the province, and whose budget is composed of provincial funds and funds from private forest product companies.

In late June 1978, the chairman of the Department of Biology at UNB indicated to the university administration that his department could find space to accommodate Dr. Varty if he was affiliated with the university. There was no discussion of a formal appointment in the department. Dr. Varty already had an informal affiliation as an honorary research associate. A few days later, Vice-President Franklin indicated to the regional director of Environment Canada that the university was prepared to host EMOFICO and asked that Dr. Varty be seconded to UNB as "Senior Research Associate accommodated in the Department of Biology". It was anticipated that Dr. Varty would do some teaching in biology and would report to the Dean of Graduate Studies through the chairman of the department.

Some faculty concern was aroused by the intention of the university administration to recommend to the Board of Governors the appointment of Dr. Varty as senior research associate. UNB procedures require that such an appointment be made on the recommendation of a department chairman. The biology chairman had, however, promised only temporary accommodation. He had made no recommendation about an appointment.

Dr. Varty began his affiliation with UNB in September, 1978. Though accommodated in biology, he was not yet formally appointed as a senior research associate and thus had no formal affiliation with the university. In organizing and participating in a conference held in February 1979, Dr. Varty nonetheless represented himself as a member of the Department of Biology. A few months after moving into the department, Dr. Varty reported on his activities to Dr. Webb and to the managing director at Forest Protection Limited. The report to the crown corporation occasioned some comment in view of the vested interest which FPL is widely considered to have in maintaining the spray program.

Administratively, Dr. Varty was "assigned", under a complicated secondment arrangement, from Environment Canada to the New Brunswick Department of Natural Resources which, in turn, "assigned" him to UNB as chairman of EMOFICO. It was agreed that he would continue to receive his salary and benefits through Environment Canada, his original employer, and that New Brunswick would reimburse Environment Canada for these costs. Subsequently, the university, Environment Canada and the New Brunswick Department of Natural Resources agreed that the provincial funds would find their way to the federal treasury via the university. Precisely why the university became involved in the transfer of funds has not been explained. It is also seen as significant that the New Brunswick funds were to be paid to UNB by Forest Protection Limited. The effect of this complicated arrangement appears to have been to obscure the real source of the funds.

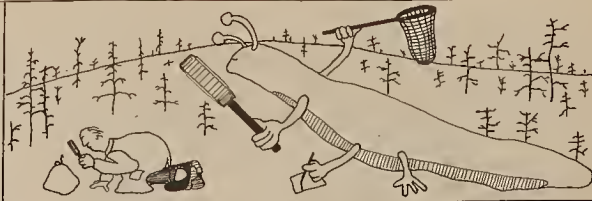
In February 1979, the Department of Biology was belatedly advised by the university administration of the history of Dr. Varty's affiliation with the university and asked to consider recommending his appointment as senior research associate in the department. Some members of the department expressed concern that the appointment of Dr. Varty would give the appearance of establishing a cover for the work of EMOFICO. A motion to reject the proposal that Dr. Varty be made a senior research associate was tabled pending circulation of Dr. Varty's curriculum vitae. At about the same time, the UNB faculty association became aware of the circumstances relating to Dr. Varty's affiliation with the university and began to compile a watching brief. The local and regional media also became interested in the Varty appointment.

In mid-March 1979, Dr. Varty advised the acting chairman of biology that he did not wish to be affiliated with the department. The Dean of Science communicated his "extreme disappointment" that the "unfriendly atmosphere" in biology had "brought discredit to the university". He expressed the hope that the Faculty of Forestry might "salvage" the situation. The acting chairman sharply rebuked the Dean of Science for his remarks and pointed out that the department had behaved with dignity.

By the end of March, the Department of Forest Resources in the Faculty of Forestry had agreed to recommend the appointment of Dr. Varty as senior research associate. This recommendation was approved by the Senate appointments committee. Despite protests by AUNBT that the credibility of the university would be compromised, the Board of Governors approved the appointment. Three of the five faculty members on the board and two other board members were recorded as having abstained on the vote.

Shortly thereafter, the president of AUNBT advised President Anderson that the AUNBT annual general meeting had voted to advise the academic administrators involved in the Varty appointment that their actions were not compatible with CAUT and university policies. AUNBT was concerned about the possibility that the university, by agreeing to an appointment apparently funded by powerful vested interests, had placed itself in a position where its credibility might be questioned. It was made clear that the AUNBT protest was based on the reasons which had been advanced for the appointment and on the source of funds to pay for it and was not to be construed as questioning Dr. Varty's objectivity as a scholar. It was clear that AUNBT was questioning the wisdom of making an appointment which the province viewed as necessary to establish the credibility of the monitoring program. There was continuing concern about the financial involvement of Forest Protection Limited "which although a crown corporation has a strong vested interest in the continuation of the (spray) program".

Shortly after the Varty appointment was raised in the New Brunswick legislature, President Anderson, in response to a request for clarification from the Minister of Natural Resources, Mr. J.W. Bird, provided a summary of the involvement of UNB in the activities of EMOFICO and in the appointment of Dr. Varty. President Anderson stressed that Dr. Varty would be independent of government and industry influences and, in particular, would not be dictated to by FPL. He pointed out Dr. Varty would "enjoy the full protection of academic freedom which is traditionally accorded to university academicians". He attached the terms of reference for EMOFICO which outlined his mandate to coordinate research on the effects of forest spraying, to monitor the environmental impact of such spraying and to advise and inform governments and the public of the effects of such spraying. The terms of reference made it clear, however, that EMOFICO's mandate was to be concerned only with the effects of spraying on the "environment" and that it would not in-



Tom McDonald

clude public health issues. To those who see man and his environment as inseparable, the distinction was obscure and did nothing to remove the suspicion that centering EMOFICO at the university was a way to establish its credibility.

By now the objectivity of EMOFICO and its chairman had been questioned in the press and on the radio. On March 28, 1979, Mr. Dana Silk, President of the Conservation Council of New Brunswick, wrote to Len Marchand, then federal Minister of the Environment, to protest bias on the part of the federal Maritime Forest Research Centre. Specific allegations of pro-spraying bias were levelled against Dr. Varty and against federal and New Brunswick officials connected with MFRC. It was noted that these officials had arranged Dr. Varty's executive transfer to UNB. Mr. Silk commented also on the circuitous way in which Dr. Varty was being paid: by the Canadian Forestry Service reimbursed by UNB which, in turn, reimbursed by Forest Protection Limited.

Following an investigation, Mr. Marchand rejected all Mr. Silk's allegations about the bias of Canadian Forest Service personnel and Dr. Varty in particular.

Mr. Silk's letter elicited an intemperate private letter to President Anderson from Dr. Webb, the special advisor to the provincial Minister of Natural Resources and a former director of MFRC. Dr. Webb suggested that because of Mr. Silk's expressed opinions, the Conservation Council of New Brunswick had put at risk its entitlement to be represented on a proposed advisory council to EMOFICO. This letter suggests that there was less than enthusiastic support for the view that all shades of opinion on the spraying program should be represented on the advisory council.²

AUNBT continued to be concerned about the compromised position in which it felt the university had been put by the Varty appointment. The association pointed out, for example, that annual EMOFICO reports would be issued under university authority. AUNBT President Dr. Ron Lees, in his capacity as a member of the UNB Advisory Committee on Research and a professor in the Faculty of Science, requested science members of the university Senate to raise the question as to whether Dr. Anderson's proposal for EMOFICO should be referred to the Advisory Committee on Research as the appropriate academic body to review and approve the status of what appeared to be a *de facto* UNB research institute. Dr. Lees expressed concern that EMOFICO, as an organization, was headed by a person with only a tenuous link with the university and asked for clarification of status of EMOFICO within the university. Was EMOFICO a university research organization or was it not? Dr. Lees suggested that these matters be considered by the Advisory Committee on Research as a matter of urgency. A motion to this effect was narrowly defeated in the Senate on May 2, 1979. During the Senate discussion, President Anderson and Acting Vice-President R.J. Kavanagh maintained that EMOFICO was not a university committee though it was widely perceived to be so. Only its chairman had an affiliation with the university.

In late April, AUNBT consulted CAUT on further action. The association made it clear that it was not endorsing an anti-spray position but was concerned only that the university not be used by pro-spray interests to lend credibility to the program.

On July 6, 1979, at a twice-postponed meeting of the twelve-man Advisory Com-

mittee on Research, which was attended by only five members (three of whom were ex officio and another, the non-voting secretary), a proposal was approved for an advisory council to the chairman of EMOFICO. The mandate of the council is "to establish, approve and revise periodically the terms of reference of the EMOFICO committee" and to ensure public access to the deliberations and activities of EMOFICO. The fourteen-member council includes seven UNB representatives, four federal and provincial government representatives, one Conservation Council representative, one representative of the New Brunswick Environmental Council and one representative of the University of Moncton. It is chaired by the UNB Dean of Graduate Studies and Research. The council is authorized to monitor the work of EMOFICO, to advise its chairman, to ensure openness in reporting and to report to the UNB Senate each year.

Despite the institution of the council, the precise status of Dr. Varty and EMOFICO within the UNB community remains unclear. Federal and provincial government officials seem to regard the chairman and the committee as falling under the aegis of the university. Dr. Varty himself appears to hold this view. Members of the university administration, however, apparently see EMOFICO as a body over which it has little control, though it recognizes some responsibility to oversee the work of the chairman and to monitor the activities of the committee. To the public, EMOFICO appears to be a university agency with all the objectivity usually associated with such bodies. To many members of the UNB academic community, however, the governments concerned and the forest industry are simply using the university as a protective cover.

1. Dr. Webb has stated: "It is categorically untrue that I stated any objection to dealing with Dr. Franklin because I considered him to be an 'environmentalist'. The word does not appear in the letter and I categorically did not state any objection to dealing with him in the administrative role indicated by Dr. Anderson, whatever his views were. The letter raised the question, as a final precaution, whether views such as expressed earlier by Dr. Franklin in a letter to a newspaper over his signature as Vice-President, Academic, of the University might reflect a more generally held partiality about the budworm spraying issue at topmost levels of university management and whether this might, in time, present a source of inhibition on the intellectual and scientific independence of the EMOFICO Chairman and the reporting of his evaluation. I, and others, felt that we owed it to Dr. Varty to check on this point, however unlikely, in continuing to encourage his acceptance of a role that could be counted upon to encounter dispute and disagreement from other areas, including other areas of the University."

2. Dr. Webb has observed: "I did not, as a general point, object to the Conservation Council being represented on the Advisory Board and except for Mr. Silk's letter to Mr. Marchand, would have considered that this organization was the most appropriate of the public interest groups that exist in New Brunswick. I did take strong exception to the organization seeming, through Mr. Silk's letter, to be behind tactics clearly intended to discredit Dr. Varty by besmirching his character and professional integrity and suggested that an organization that would support such tactics did not deserve the confidence implicit in the contemplated appointment to Dr. Varty's Advisory Board. I therefore stated that I hoped the Council would disassociate with Mr. Silk's letter, not that it should not be represented as proposed."

Dr. Sim is Associate Executive Secretary of the CAUT.

Strike at Windsor averted

A strike called for by the faculty association at the University of Windsor has been narrowly averted by a last minute resolution of outstanding differences between the association and the university. The final agreement came forty-five minutes before the pickets were due to walk at 8 a.m. on March 3rd.

After nine months of contract negotiations with the university administration, Windsor's faculty association met on 24 January and decided by an overwhelming margin to proceed to a strike vote on the 31st. Professor Roland Penner, the president of CAUT, was present at that meeting and expressed his support for the determination of the faculty both to secure a contract and to prevent erosion of the existing benefits in the collective agreement. A week later, on the 31st, the faculty voted in secret ballot by a margin of 377 to 50 to take strike action on March 3rd should a contract not be agreed upon by that date.

At that time no financial offer had been placed on the table. The major problem in negotiations was the determination of the administration to gut the existing provisions on financial exigency and redundancy in the collective agreement. These had been agreed to in the first contract. They specified that no one should be laid off for financial reasons except through the exigency article of the contract, mandated a freeze, required a jointly nominated university commission to examine and report on the supposed exigency, placed the onus on the board of governors to demonstrate the bona fides of the exigency, and permitted the board to lay off only to the level recommended by the commission. The administration initially proposed that these all be struck and replaced with a single sentence leaving the declaration of financial exigency totally to the discretion of the board of governors. This was subsequently modified by wording for exigency and redundancy which was more elaborate but arrived at the same point.

Both the president of the faculty association and the president of CAUT made it clear in public releases that the effect of the administration proposals would be to remove all the safeguards against the arbitrary removal of faculty which had been built up over the past quarter century since the administration would inevitably label all terminations as lay-offs which, under their proposals, would be at their absolute

discretion.

"The proposals of the university on exigency and redundancy were the first shot in the exigency wars of the eighties," said Dr. Donald C. Savage, Executive Secretary of the CAUT. "Certain members of the administration had made it clear that it was their intention to demonstrate to the other universities how a really tough management could put the union in its place."

On February 9th, the OCUFA Board passed a motion of support for the Windsor faculty association and called on all local associations in Ontario to inform the president of the university of the gravity of the situation. The new president of OCUFA, Professor Sarah Shorten of the University of Western Ontario, visited Windsor and talked to the president of the university about the seriousness of the issues raised.

Meanwhile, strike preparations were put into place under the direction of Professor Clive Ansley, the president of the association. CAUT arranged for its executive secretary and for professor Denis Saint-Jacques of the Université Laval to meet with the organizers and to discuss the nuts and bolts of strike action. All the details were in hand prior to the last weekend of negotiations.

The trustees of the CAUT Strike Fund were apprised of the situation. At that time, the fund stood at about \$600,000 and the executive secretary indicated that the CAUT Board would be asked to authorize an additional financial appeal to those who were not members of the fund.

Immediately after the strike vote, the administration negotiators accepted the existing financial exigency clause with a minor modification on timing and agreed to a clause dealing with redundancy which prohibited any lay-offs for redundancy during the contract.

Following this, the university negotiators placed on the table the remaining items to be decided which were mostly of a financial nature. The university wished to prevent a career progress plan, place caps on all ranks, and remove certain benefits from the librarians as well as to depress the salaries as low as possible. Little or no progress was made until John Dempster, the provincial mediator, ordered the parties to meet on Friday, February 29th. The chief negotiator for the union was Professor Bob Kerr of the Faculty of Law. The executive secretary of CAUT joined the negotiating team on the

29th. By this time, it was clear that the university was not pleading poverty but simply wished to spend the money on other things. It had produced increasing amounts of financial data but still refused to open the books. Late Saturday night it became obvious that no agreement could be reached. The administration had presented a take it or leave it package and had refused repeated suggestions by the union that the economic package be put to arbitration. The faculty was summoned to a meeting on Sunday afternoon. Four hundred and five of the 432 on campus academic staff were present and voting at that meeting. By a margin of 318 — 86 or 79%, the meeting in a secret ballot turned down the final administration offer.

Negotiations followed throughout the night and agreement was reached shortly before the pickets were due to take their places. The final settlement, when compared with the final offer of the administration, improved the salary package particularly for associate and full professors, established a career progress scheme, accepted a cap at the full professor rank which, however, can be pierced and a purely symbolic cap at the level of associate professor in the second year of the contract which is set high enough so that virtually no one will be affected. It protected the holiday entitlement of the librarians which had been challenged and accepted a capping arrangement at the upper two levels with the same real and symbolic effects as for faculty. Funds for travel were improved and the anomalies fund was maintained despite the desire of the administration to remove it. It was agreed that, if there were any difficulties, final wording of the issue in question would be put to binding arbitration.

"The Windsor academic staff", said Dr. Savage, "were prepared to recognize the financial problems of Windsor and to accept a settlement in that light. They were not, however, prepared to be run out of town by the administration, and the final financial settlement recognizes a reasonable balance of interests. In my view", he stated, "the Windsor faculty fought for us all when they successfully defended and improved what must be the best exigency and redundancy guarantees in Canada."

On March 11th, the faculty association ratified the contract by a vote of 248-25 or 91% with one spoiled ballot.

Stewdents kant rite says university report

More than 50 per cent of the students entering the University of Alberta have an inadequate knowledge of written English, according to a recent study.

The general faculties council (GFC) study found that university students have serious difficulties with spelling, grammar, idiom, and diction.

About 54 per cent of the 406 students tested by the GFC had unsatisfactory exam results, while only five per cent actually wrote completely satisfactory exams.

"The problems are of sufficient magnitude to merit universal testing of entering students," said WCC chairperson Pat Hayes.

The one and a half hour GFC test, written by first-year student volunteers, consisted of an objective multiple-choice section and an essay question testing composition skills.

Students who did unsatisfactory work on the exam "will have serious problems in meeting the writing requirements of first year university level work," says the GFC study.

Meanwhile at the University of Toronto, students first registering in 1980 will be required to pass a test in English proficiency. Previously some U of T campuses administered proficiency tests but only for information purposes.

Hill Webster, associate arts and science dean, said the rationale behind the testing is to put pressure on high schools to improve the writing skills of their students.

The U of T English proficiency committee has proposed that students who do not pass the test within 12 months of their first registration be given a further 12 months to do so, during which they would be expected to enroll in a writing skills program. Students who still fail to pass the test would not be permitted to continue their studies until successfully writing the exam.

The U of A is also moving towards establishing entrance exams with minimum requirements for all students.

Political scientists won't meet at universities under censure

The Atlantic Provinces Political Studies Association (APPSA) has reiterated its policy of not holding annual meetings at universities that are under censure by the Canadian Association of University Teachers.

The APPSA's secretary-treasurer, Peter G. Boswell of Memorial University, said the association reiterated its policy during its fifth annual conference which was held recently at the University of New Brunswick in Fredericton.

Censure is imposed on a university's administration by CAUT when it has been

determined that conditions of academic freedom are not satisfactory at that institution.

Boswell said that for the past two years the political science department at the University of Moncton has indicated a strong desire to host APPSA's annual meetings. However, he explained, the association has been unable to accept the invitation because the university's administration is presently under censure.

APPSA is composed of mainly political scientists who teach at universities in the Atlantic region. Its membership also in-

cludes political scientists from other parts of Canada and non-academics who are interested in the political process in Atlantic Canada.

Memorial University has been censured by CAUT for refusing to renew professor Marlene Webber's contract because she was a member of the Communist Party of Canada (Marxist-Leninist) and because the university felt her politics had crept into her teachings.

The university refused to renew the contract in December, 1977.

CAUT imposed the first stage of censure in May, 1979, after the university refused to reconsider its decision. A CAUT committee concluded the university breached academic freedom when it failed to present "admissible and cogent evidence" of Webber's unprofessional activities. The committee found that charges of misuse of the classroom were unsubstantiated, that Webber had in fact alerted her students to her political beliefs, and made a serious effort to present a balanced political perspective.

Allan Evans new editor of CAUT monograph series

Allan Evans, professor of classics at the University of British Columbia, has been named general editor of the Canadian Association of University Teachers Monograph series on university teaching, research and education. The series is published by Clarke Irwin, Ltd. (Toronto) in cooperation with the CAUT, and two titles have appeared thus far. Professor Evans succeeds Naomi Griffiths, dean of arts at Carleton University.

CAUT Bulletin Special summer edition

See page 29 for details.

PROVINCIAL GRANTS TO UNIVERSITIES

PROVINCE	YEAR	PERCENTAGE INCREASE	TOTAL GRANT TO UNIVERSITIES
New Brunswick	1977-1978		\$ 50,286,260
	1978-1979	6.70%	\$ 53,661,610
	1979-1980		\$ 58,816,610*
	1980-1981	9.3%	\$ 64,286,555
Nova Scotia	1977-1978		\$ 74,908,540
	1978-1979	6.70% plus 1%	\$ 87,452,930
	1979-1980	5.50%	\$ 92,262,841
	1980-1981	9.3% ⁿ	\$100,843,290
Prince Edward Island	1977-1978		\$ 6,373,240 ⁿ
	1978-1979	6.70% plus 1%	\$ 6,567,050 ⁿ
	1979-1980		\$ 6,947,820 ⁿ
	1980-1981	9.3%	\$ 7,593,967
Newfoundland	1977-1978		\$ 41,450,000
	1978-1979	4.30%	\$ 44,000,000
	1979-1980		\$ 45,580,000 ⁿ
	1980-1981	not yet announced	\$ 2,000,000 ⁿ
Quebec	1977-1978	18.10%	\$547,860,000
	1978-1979	12.90%	\$618,287,000
	1979-1980	8.90%	\$673,316,000
	1980-1981	not yet announced	
Ontario	1977-1978		\$704,400,000
	1978-1979	5.80%	\$745,400,000
	1979-1980		\$782,400,000 ⁿ
	1980-1981	7.2%	\$266,000,000 ⁿ
Manitoba	1977-1978		\$ 80,625,200
	1978-1979	3.00%	\$ 83,040,000
	1979-1980		\$ 93,536,400
	1980-1981	8.1%	\$102,980,000 ⁿ
Saskatchewan	1977-1978		\$ 78,688,000
	1978-1979	9.60%	\$ 85,418,610
	1979		\$ 81,212,000 ⁿ
	1980		\$ 90,477,000 ⁿ
Alberta	1977-1978		\$172,139,000
	1978-1979	8.25%	\$186,548,000
	1979-1980	8.00%	\$201,471,000
	1980-1981	announcement expected late February — early March, 1980	
British Columbia	1977-1978	8.27%	\$191,866,003
	1978-1979	8.70%	\$209,000,000
	1979-1980	8.30%	\$226,347,000
	1980-1981	announcement expected March 1980	

FOOTNOTES:

- This figure seems to include a grant of \$549,210 to the Maritime Forest Range School (unofficial figure).
- Operating grant.
- General operating grant.
- Capital grant.
- Quebec figures have been supplied by FAPUQ.
- Operating grant.
- Capital grant.
- Ontario 1979-1980 figures have been supplied by OCUFA.
- Operating and capital grants. While the 1980 grants include heritage and consolidated funds, 1979 grants do not.
- In 1978-1979, the Maritime provinces agreed on a basic 6.7% increase plus an additional increase of 0.75% to universities who required further assistance in catching up. This affected about 6 or 7 universities in Nova Scotia. Not all of these received the full 0.75%. Furthermore, the provinces of Nova Scotia, and Prince Edward Island agreed to an additional 1.00% increase.
- Operating and capital grant combined.
- Operating grant only.
- 8.1% to all schools.
- 0.45% to dental schools.
- 0.55% to small institutions.

Income Tax Act unfair to researchers You can help

University researchers are currently forced to bear, from their own incomes, many of the costs of conducting research while those in other sectors are allowed by Revenue Canada to deduct these research expenses for income tax purposes. The CAUT has tried unsuccessfully for many years to persuade the government to change the Income Tax Act and regulations in order to provide university researchers with the same benefits for which researchers, particularly in the private sector, are eligible.

We put the following five issues to candidates during the recent election, and thought that our members might be interested in pursuing this initiative by writing to the new Minister of Science and Technology urging amendment of the Income Tax Act.

Fellowships and research grants — requiring an amendment to the Income Tax Act

The Income Tax Act permits a deduction of \$500 from the aggregate of academic prizes, bursaries, scholarships and fellowships received during a year. Research expenses actually incurred are deductible from a research grant. Much confusion has arisen over the years because there is no satisfactory distinction between fellowship and research types of grants. This confusion could be eliminated by the simple expedient of allowing a deduction of \$500, or research expenses, whichever is greater, from the aggregate of all such awards received by an individual during the year regardless of the types of grants or the names applied to them.

The Canadian Association of University Teachers has submitted such a recommendation to the Department of Finance on three separate occasions since the taxation of these grants was introduced in 1971. So far the Minister has chosen to ignore this recommendation.

It is anticipated that the amount of income tax involved in the suggested revision will be insignificant. It is much less than the value of the time being wasted by Revenue Canada and taxpayers in endless disputes provoked by the uncertainty of the current legislation.

Question:

Are you in favour of amending the Income Tax Act so that the recipient of research grants, fellowships, etc., may deduct \$500, or research expenses, whichever is greater, from the aggregate of the awards received during a year?

Income reporting — requiring an amendment to the Income Tax Act

The Income Tax Act requires that the payer of fees, commissions or other amounts for services, other than income from employment, must report such payments on the T4A form. Universities report non-employment income paid to teachers, such as remuneration for special lecture series, royalties, etc., on the T4A as required by law. At the same time, they do not report amounts for services performed by lawyers, accountants, doctors, etc. and, consequently, violate the law as far as these groups are concerned.

In other words, the universities and Revenue Canada have chosen to enforce the law against teachers but not with respect to other professionals. As a result of this discriminatory treatment, local taxation of

fices frequently deem such receipts to be income from employment and disallow expenses which are normally deductible from professional or business income.

Revenue Canada has taken the stand that universal enforcement of the law is not practical and that the only remedy is a revision of the reporting requirements of the Act. At the same time, the Department refuses to seek a change in the reporting requirements which would enable the law to be enforced in respect of all professionals rather than just against teachers.

Question:

Are you in favour of amending the Income Tax Act so that the income reporting requirements may be applied consistently to all taxpayers?

Research grants — requiring a change in administration policy by Revenue Canada

Under the Income Tax Act the recipient of a research grant is allowed under normal circumstances to deduct research expenses from his grant for income tax purposes. A sabbatical leave usually means an absence from home — often in a foreign country — for a period of six months to a year or longer. Most married sabbaticants are accompanied by their families and regard family travelling expenses as a necessary concomitant of carrying on research.

Revenue Canada disagrees and deems family travel costs to be a personal expense of the researcher. The sabbatical is faced with an unenviable choice. The family may be left behind, or may be taken with expenses paid from the after-tax residue of an already depleted salary, usually 75% of normal. It would be difficult to find any other country which treats its university researchers in so cavalier a fashion.

Question:

Are you in favour of a change in Revenue Canada's administration of the research grant procedures so as to allow the deduction of family travel costs and other directly related expenses from a research grant for income tax purposes?

Research — an employment duty of university teachers — requiring recognition by Revenue Canada in the administration of the Income Tax Act

Research is a contractual duty of university teachers. In the private and public sectors, the cost of performing employment duties including research activity is the responsibility of the employer who pays the expense either directly, or indirectly, by means of an accountable advance or reimbursement. The courts have concluded that the payment of such expenses by an employer does not constitute income of the employee.

The failure by Revenue Canada to recognize that the research carried on by university teachers is an employment duty has resulted in a unique treatment. All other individuals conducting research as a condition of employment are entitled to have their expenses paid either directly or indirectly by their employers. These expenses are not income and are not reported as such by either the employer or employee. University teachers should be entitled to carry on research under the same income tax conditions as any other employee.

U of T report opposes termination of tenured faculty for budgetary reasons

The following is reprinted from section 4.3 (Human Resources) of the report of the Planning and Priorities Subcommittee of the Planning and Resources Committee of the Governing Council of the University of Toronto.

The single greatest resource that any university has is its people: its academic faculty, its technical and administrative staff, and its students. In this section we focus on the academic staff.

On a University-wide basis, we recognize three major issues regarding faculty: first, the inability of the University to reduce its staff complement significantly in response to lower real income because a large proportion of its staff is tenured; second, the relative inflexibility of a largely tenured staff to meet shifting student preference for academic programs and courses; and third, the gradual aging of a teaching staff unable to renew itself through continual junior career appointments and the resulting need for large scale replacements of retiring staff about 20 years from now.

The first issue has focused public attention on tenure which, as presently defined in this University, inhibits the University from dismissing tenured academic staff for fiscal reasons. Tenure, however, means more than job security. It is a contract between a faculty member and the Governing Council which also guarantees academic freedom — the right to teach and to engage in research without political or ideological interference. The guarantee of academic freedom may be overshadowed by the job security aspect in the eyes of many at this time of financial difficulty. In the Second Interim Report we stated our concern that the fiscal crisis is now such that the University should give consideration to the issues dealt with in Section VI of the Report of the Task Force to Review Policy and Procedures on Academic Appointments (the Forster Report). Whatever the formal planning structures that will be adopted by the University of Toronto to consider the planning questions raised by this Subcommittee, we offer the following general comments on a subject which is serious and will continue to concern the institution and its critics.

Whether dismissal of tenured staff for fiscal reasons would be in the overall interest of the University community — even from a dispassionate resource point of view — is a very real question. Assuming that the University could simply "lay off" staff characterized as "surplus" or "redundant", we do not know, and cannot even make a reasonable estimate of, the number who might be affected, for we cannot now estimate what criteria would be acceptable in defining redundancy. Therefore, our comments can only be tentative. Furthermore, given the composition of this Subcommittee, they cannot be free, even in our own minds, of the suspicion of personal bias arising from the self-interest of the majority of us.

In addition to its questionable effectiveness, a University policy to dismiss tenured academic staff for fiscal reasons would undoubtedly lead the University community into another protracted debate over the very nature and relevance of tenure, not to mention the difficulties in establishing legally binding criteria for such dismissal. The direct cost of litigation and settlement of claims would be substantial but the invisible costs would be even more important. The ultimate costs — to

everyone — of a confrontation between faculty and the University on tenure would be great if immeasurable. We doubt that any money savings over the long run are so great as to justify this risk.

We do, however, wish to emphasize that this University, together with every other university, has the obligation to ensure that those of its staff who have not lived up to the expectations implied in the award of tenure are dismissed for cause. The number of cases that have been pursued for cause is very small. Although we have no concrete evidence to support our belief, we are quite certain that there are cases, in this University and in others, that should have been pursued. Arguments about the high cost of doing so are simply not acceptable reasons for not proceeding. It is the lack of action by universities in this regard which provides some justification for public criticism and misunderstanding of the nature and validity of tenure.

The second issue is that of staff flexibility to meet shifting student demands. The need is clear for the University to achieve greater staffing flexibility in the use of its academic resources. In this regard it is imperative that the University develop a better data base so that we can compare staff loads throughout the University. An approximate measure of divisional instructional productivity currently in use at the University is the instructional activity index. The index is derived by dividing workload by instructional resources. Resources are expressed by the number of FTE academic positions in a division's base operating budget. Workload includes enrolments in all undergraduate and graduate courses taught by a division; supervision of graduate students; and any clinical instruction or other instructional activity such as studio teaching or summer teaching. For the next few years most divisions must meet their objectives with the human resources they now have or, in some cases, make do with fewer. Divisions and departments having established academic priorities must ensure that those deemed more essential can be covered adequately with available academic staff. This will undoubtedly require some intra-discipline flexibility. We repeat the comment from our Second Interim Report:

...academic staff should be prepared to be flexible in their sub-specializations within their disciplines, and departmental chairmen must insist on this flexibility... We do not see why, in most cases, an existing member of the department does not have a sufficient common knowledge-base to train himself or herself, upon reasonable notice, to teach other sub-areas of the discipline competently, at least at the undergraduate level. Special short-term leaves or other arrangements may be appropriate so that staff can prepare or take graduate level courses to reach the necessary level of competence, but these would be worthwhile investments. (3.2.2.)

The third issue deals with the need to provide a continuous inflow of vigorous scholars. Most divisions of the University have absorbed the major portion of budget cuts in recent years by not replacing retiring or resigning staff. Where new faculty members have been hired, a significant number have been appointed to a contractually limited term to provide financial flexibility. Such responses may have been appropriate in the short range but if some way is not soon found to assure the continual flow of newly prepared university

BARGAINING TALK NEGOCIATIONS

by Ted Bartley (CAUT Collective Bargaining Officer)

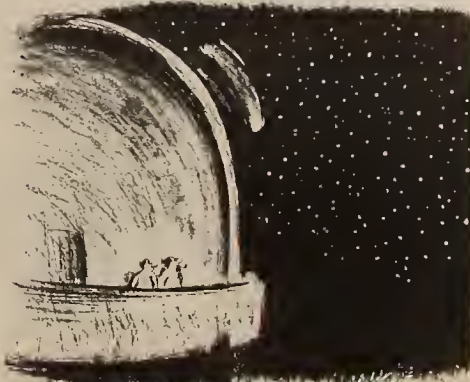
After some six years, the academic staff bargaining units at the UNIVERSITY OF MANITOBA have finally merged into one comprehensive unit. By a decision dated February 19, 1980, the Manitoba Labour Relations certified the UNIVERSITY OF MANITOBA FACULTY ASSOCIATION as the bargaining agent for a unit including "All persons employed full-time by the University of Manitoba holding the rank of Lecturers, Assistant Professors, Associate Professors, Professors and Academic Librarians...". The effect of the decision is to merge five previous certificates held by UMFA (1974), Foods and Nutrition Faculty Association (1975), Social Work Faculty Association (1975), Medical Rehabilitation Faculty Association (1976) and Agriculture Faculty Association (1976). The new certificate also brings into the bargaining unit the rest of the lawyers, chartered accountants, clinical psychologists, pharmacists, engineers, architects, nurses and interior designers. Some of these had previously been excluded based upon a particular paragraph of the Manitoba Labour Relations Act which was later amended in 1976. These additions bring the total UMFA unit to about 1,115.

The severed units had always been something of a fiction in any event, since they had for some time recognized their common interest and negotiated together under the UMFA banner. The recent decision removes this fiction, and brings the bargaining unit at Manitoba into line with most of those in the rest of the country. In the words of the solicitor who represented UMFA in the application, "This ends a chapter in the history of the Association, because the Manitoba Labour Board has now done what it should have done when the Application for Certification was initially made."

The NOVA SCOTIA TECHNICAL COLLEGE FACULTY ASSOCIATION recently became the twenty-ninth CAUT affiliate to secure collective bargaining rights under provincial statute. A hearing was held before the Nova Scotia Labour Relations Board on January 28, 1980, with the only contested issues being the inclusion of professional librarians in the bargaining unit. Nova Scotia is the only Canadian Jurisdiction in which professional librarians have been excluded from a faculty bargaining unit by a provincial labour board ruling (SAINT MARY'S, 1974), although they had been included in bargaining units at the COLLEGE OF CAPE BRETON and DALHOUSIE by agreement of the parties. By ruling that the professional librarians should be included in the NOVA SCOTIA TECH bargaining unit, it appears that the Nova Scotia Board may now be rejecting its SAINT MARY'S precedent. If such is the case, Nova Scotia can now also be seen as conforming with bargaining unit practice in the rest of the country. As the final step in the certification process in Nova Scotia, the vote was counted the day after the hearing. Of the votes cast by members of the bargaining unit, over 90 per cent were in favour of certification and an order was issued accordingly.

Turning to negotiations, eleventh hour talks at WINDSOR narrowly averted a strike. Agreement in principle was reached less than two hours before a 9 a.m., March 3 deadline. The UNIVERSITY OF SASKATCHEWAN FACULTY ASSOCIATION recently ratified a new one year agreement running to June 30, 1980... The collective agreement at CARLETON was recently extended to April 30, 1982. The extension preserves interest arbitration on monetary matters for the next round of negotiations, offers more attractive provisions on such matters as reduced time, sabbatical leave, internal transfers and voluntary separation which the parties feel will ease some of the current financial pressure on the institution, and pledges that there will be no lay-offs made before June 30, 1980... A renewal agreement extending to April 1, 1981 was also recently ratified at YORK. One of the main issues in dispute had been the jurisdiction of an arbitration board to hear appointment, tenure and promotion grievances, and this has been expanded in the new agreement... An impasse in the negotiations at SAINT MARY'S was resolved in February by an agreement to submit outstanding monetary issues to binding interest arbitration.

Finally, it might be noted that two faculty members at ALGOMA were successful in February in appealing their selection for lay-off under the financial exigency procedures. In the result, the University must now look at other means of alleviating the budgetary crisis.



"I do wonder, sometimes, what other galaxies have done about tenure."

• p. 16

Professor Black replies . . . p. 4

Dr. Stewart claims that because I have been one of the protagonists in the situation at Brandon University I find it "difficult to be objective." This may be so, but, as Dr. Stewart's letter so aptly demonstrates, the non-protagonist may be handicapped by an even more serious disability; namely, an inability to perceive and comprehend both facts and context. Moreover, in Dr. Stewart's case these problems are compounded by faulty logic.

To begin with, Dr. Stewart suggests that the budget committee was established solely as a result of faculty pressure on a "concerned but perplexed Board of Governors." Moreover, his comments imply that faculty demands for the creation of this body were ill-conceived — merely a phase in the "see-saw activity between the administration and academic staff."

Faculty pressure was certainly a factor in the Board's decision to create the budget committee, but it was not the only factor. Prior to 1974, faculty input into the budgetary process was channeled through an advisory committee chaired by the President and comprised of representatives from all groups on campus. This committee offered many suggestions for effecting improvements in the allocation of university resources, but few of them were reflected in the budgets submitted for approval to the Board of Governors. Consequently, by 1973 there was much dissatisfaction with the advisory committee. This discontent came to a head in that year when the University responded to a third successive deficit — 1971, \$164,000; 1972, \$427,000; and 1973, \$531,000 — by seeking to terminate sabbatical leaves and cut academic and other positions. Subsequent discussions on the financial crisis and the budgetary process involving all segments of the university led to the formation of the Board Budget Committee.

The Board Budget Committee was, as the title implies, a committee of the Board of Governors. As such it was chaired by the Chairman of the Board of Governors. All groups on campus supported the formation of the committee — including the Administration, which, as a colleague pointed out, saw the advantage in shifting the burden of resolving the financial crisis to a broadly-based committee. And all groups on campus, except for the administration, were represented on the committee. Contrary to what Stewart argues, the decision to exclude the President from the committee was eminently sensible. The role of the President is to execute policies set by the Board and Senate, not to make policies. What the creation of the Board Budget Committee did was force the Board to assume responsibility for policy formulation and clarify the role of the President.

Dr. Stewart suggests that the demise of the Board Budget Committee was inevitable. This is a fallacy. The Board Budget Committee proved effective in its first few years; resolving the financial crisis and streamlining the administration. A number of factors brought about its demise, but the decisive one was the appointment of an authoritarian President during a period when the faculty and other groups on campus were involved in other struggles.

Secondly, Dr. Stewart's comments on the unionization of faculty at Brandon University are, to put it mildly, wrong in every detail. The issue which led to faculty unionization at Brandon University was a ruling by the Manitoba Labour Board in June, 1977 that BUFA was not a union and that the document on wages and working conditions which had been negotiated between BUFA and the University was not a collective agreement. The Executive — Dr. Stewart's "active minority" — did what an executive is supposed to do and convened a meeting of the BUFA membership — the 90 per cent or so of faculty members who paid dues and supported the organization — to consider the implications of the Labour

Board's ruling. That meeting voted overwhelmingly to seek certification. BUFA subsequently applied for certification with approximately 75 per cent of the individuals in the proposed bargaining unit as members. The application was approved.

Dr. Stewart states that some faculty members at Brandon University "found themselves compelled to become members of a union against their wishes and contrary to their personal convictions." This is a misconception. The 95 per cent — or more — of faculty who are currently members of BUFA joined voluntarily by paying a \$1.00 initiation fee and signing an application form. Of course, in accordance with the Manitoba Labour Relations Act our Collective Agreement contains an agency shop provision stipulating that union dues shall be deducted from all individuals covered by the terms of the collective agreement, including those who are not members of BUFA. However, since all members of the bargaining unit benefit from the conditions of employment and other benefits negotiated by BUFA, and BUFA has the obligation of fair representation, such an arrangement is both equitable and just.

Finally, Dr. Stewart's comments on the initial round of negotiations at Brandon University reflect the fact that during the year bargaining was taking place he was preoccupied with "making the university work." The BUFA negotiators were not out to prove their mettle; they were out to get the best possible agreement for BUFA members — and, they would like to believe, for the University. Moreover, despite their lack of practice "in the finesse of negotiation and diplomacy," the "unwise things" they said and wrote, and their playing at "little war games" the BUFA negotiators came out of the bargaining — thanks to the support of the membership — with what is, on balance, one of the best collective agreements in Canada. And what is more, BUFA has allowed deviations from the terms of the agreement, provided such deviations are in the interests of BUFA members and the University.

In conclusion, I would concur with Dr. Stewart's observation that there are many ways in which the University could be improved. We need a stronger Senate. We need a Board which better reflects the character of the university and broader communities. And we need to get rid of reactionary policies instituted by the present administration. The difference between Dr. Stewart and me is that he believes these changes can be effected through sensible discussions with the President, Board, etc.; whereas I believe they can only be achieved through struggle.

Errol Black
Brandon University

Income Tax Act . . . p. 14

Question:

Are you in favour of requiring Revenue Canada to recognize that research is a contractual duty of university teachers and that research expenses paid either directly or indirectly by a university are deemed not to be income of the teacher?

Overseas employment exemption — requiring an amendment to the Income Tax Act

The recently defeated budget contains a proposal that employees of Canadian taxable companies be exempted from income tax on 50% of their salaries while performing services for their employers in foreign countries. Since universities are not taxable companies this exemption would not extend to teachers who perform research or teaching duties for their employees while overseas.

Question:

Are you in favour of implementing the overseas employment exemption and, if so, would you support an extension of the exemption to include university teachers?

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Some teaching of courses in French literature or civilization.

DEADLINE: When position filled.

REPLY TO: Mr. Donald E. Ayre
Secretary of the University
Lakehead University
THUNDER BAY, Ontario
P7B 5E1.

Lakehead University

U of T report . . . p. 15

teachers into the profession we will face a problem similar to that of the 1960s, namely the need to recruit from outside of Canada most of the new generation of scholarly educators to replace the presently aging cohort.

In the long run, the resolution of these planning issues will be of crucial importance for the future of the University. We do not have solutions to this problem but we suggest some possible approaches. For approximately a decade, the reduction of staff through retirements and resignations may not be large enough to make possible sufficient appointments. Serious efforts

should be undertaken to encourage early retirement or part-time services. In a time of continuing inflation this will be a difficult task. The University and faculty should work together to develop programs and courses in areas of demonstrated educational need and opportunity such as continuing education and third world teaching, for example. We should also work together constantly and consciously to reduce costs in all areas of our functioning and consider such other possibilities as the integration of overload teaching into a regular workload. In these ways it might be possible for the University to begin to recruit new staff.

October 29, 1979

Dr. L. Harris
Vice-President Academic
Memorial University of Newfoundland
St. John's, Newfoundland
A1C 5S7

Dear Dr. Harris:

I was grateful to you for the long and frank discussion concerning the case of Professor Webber. I think we had a useful exchange of opinion on this and related issues. You will recall that I promised to put the views of myself and Professors Hart and Penney on behalf of CAUT and MUNFA as to why the university should be re-examining the case.

First of all, I would like to reiterate the point that any further examination of the case does not cast doubt on the good faith of those who made the decision nor on those who reviewed it at any stage. It is perfectly possible for anyone to act in good faith but at the same time to agree that his or her actions should be reviewed or re-examined by another body if the merits of the decision or the procedures involved are reasonably challenged.

There clearly is a disagreement now between the faculty association and the university administration concerning the disposition of the Webber case. In such circumstances many administrators have turned to *ad hoc* procedures which have a real chance of resolving a dispute without either abrogating their own existing procedures or calling into question the good faith of anyone involved. In fact since the association has made it clear that it disputes the decision of the administration and the board, it might be useful to examine the precedent of the binding investigation at Acadia in the McCarthy case where an adjudication took place between the faculty association and the board precisely because Professor McCarthy at that time was not a member of the faculty at Acadia.

I indicated to you that the CAUT preferred to use binding arbitration as the means of settling such disputes but that we were flexible in regard to various possible systems of investigation and resolution.

At Moncton we and the faculty association were prepared to agree to a two-stage arbitration, the first chaired by the Vice-Dean of Law at the University of Montreal to decide whether there was a case to arbitrate and the second, if there was a positive decision in the first stage, to settle the merits of the case. At Acadia CAUT and the faculty association agreed to appoint a single binding investigator, the Dean of Law at Queen's University, on terms of reference suggested and approved by the Board of Governors and agreed to by the faculty association, but with all other procedures at the sole discretion of the Arbitrator including the range of remedies. I am sure that if you discussed the matter with President Sinclair, you would discover that Dean Adell was expeditious and fair in his proceedings. We are thus willing to discuss these or any other formulations in this general area which you might propose.

We discussed whether or not CAUT really was open to any other form of settlement that might be proposed. I assured you that we were willing to discuss other solutions and that we had done so in the case of the group of professors at Simon Fraser where we negotiated what we considered a reasonable settlement which did not involve binding arbitration as the sole method of settlement. Thus CAUT and MUNFA are prepared to negotiate with you on the basis of any proposed settlement that you might care to make.

I suggested in our conversation that there were particular examples of the violation of natural justice in the specific performance of the tribunal. There is, of course, some difficulty in listing these since the tribunal had to conduct its hearings in secret and erase the tapes as a consequence of the rules which it had imposed upon itself. Nevertheless we believe that there were a number of serious errors.

Recent correspondence between Memorial and the CAUT The Webber Case

1. The charge. a) It is now stated that the only charge was fanaticism in the classroom. Yet this charge was not put to Professor Webber by the Director of the School in his formal letter indicating the reasons for non-renewal. The charge related instead to political activities on and off the campus which no reasonable person could assume referred solely to fanaticism in the classroom. Thus it would appear that the tribunal was either adjudicating the wrong question or allowing the charge to be improperly altered.

b) If the charge was political activity on and off the campus, MUNFA and CAUT would argue that this itself was a violation of the procedures (section 1.2 (c) of the terms and conditions of employment) of Memorial University which guarantees the freedom to express political opinion and thus ensures that contracts cannot be abrogated for political reasons. We understand that general allegations relating to political activity were introduced by the University into the hearing.

c) If the charge is fanaticism in the classroom, then the decision could not flow from the evidence because the School presented no general and authorized survey of student opinion nor the results of any visitations to the classroom by the administration; on the other hand, Professor Webber produced evidence in the form of student surveys, reading lists, essay assignments and the like to refute possible allegations of this nature.

2. Improper evidence. a) The University did, however, produce letters from parents complaining of Professor Webber. All but one of these were written after the university had decided not to renew the contract of Professor Webber. The one that preceded the Director's letter to Professor Webber had been written much earlier, had not been drawn to Professor Webber's attention, and had not been acted on by the Director. The style of at least one of these letters indicates that the author did not have an arms-length relationship with the university administration.

b) The School argued that Professor Webber was of limited use to it because the open expression of her political views caused members of the public to think ill of the university. If the sole charge was fanaticism in the classroom, such argumentation should not have been admitted by the tribunal.

3. Improper onus. Normally, there is an evidentiary responsibility on probationary professors to produce evidence to persuade the appropriate tribunal that their contract should be renewed. Thus if the employee fails to convince the tribunal that he/she has met the defined academic standards at the university, for example in the area of scholarly activity, the onus would not have been met and the faculty member could be correctly non-renewed. There is on the other hand, however, a clear line of cases in the arbitral jurisprudence to the effect that if an employer wishes to non-renew the contract of a probationary employee for disciplinary reasons (such as misconduct, serious neglect of duties or gross negligence), then the onus is on the employer to demonstrate the case against the individual. This case is clearly of the second type, given the allegations made, and the correct onus of proof approach was not adopted by the Tribunal. The University Appeal Tribunal ruled that Professor Webber would have to prove that she had

not abused her professional status and/or that the recommendation of the school had not been made in good faith or through proper consultation. Such a high standard of proof would not have been imposed in the arbitration process and, if it had, could likely be quashed by the courts on judicial review. But precisely because this is not an arbitration pertaining to employee contracts according to the normal rules of such arbitrations, it appears impossible to challenge the decision legally in the same manner as one could challenge a labour arbitration which adopted such rules.

4. Failure to examine or rule on contested evidence. We understand that no attempt was made by the tribunal to inquire into flatly contested allegations of fact (e.g. that she sold her Party newspaper in the classroom, that she organized and corralled students into study groups, that her materials were exclusively Marxist). The failure either to adjudicate these contested matters or to reject formally the allegations left them on the record and thus part of the basis for the judgement of the majority of the tribunal.

All these examples should, I believe, persuade you of the merits of the argument that Professor Webber did not have the same rights that she would have had if she had been before a formal arbitration of the type normally used to regulate employee differences with employers. You did indicate in your discussion with us that if you were persuaded that natural justice had not been preserved in the hearing or that Professor Webber had not had the same rights as she would have had before a regular arbitration, you would unhesitatingly support some form of third-party review. I think the evidence is there, and I hope, therefore, that you will be persuaded of the need for a review.

We also discussed the rules by which the tribunal operated. We pointed out that, although the faculty association had agreed to the structure for the tribunal, it had never agreed to or been consulted on the internal procedures. (*Supplementary procedures of April 19, 1975 and Guidelines of July 1, 1975*). You argued that the Association had given its consent by its silence on these procedures. In fact, when the Association did eventually find out about the internal procedures it did express its dissatisfaction with the procedures in writing long before the Webber case.

Finally, we discussed the issue of whether or not there were or should be restrictions on the academic freedom of faculty in professional schools which would not be the case, for instance, in the faculty of arts. I would prefer to discuss that issue with you separately. However, insofar as this argument was placed before the tribunal, it too was improper because section 1.2 (c) makes no such distinctions between faculty members.

I would like to thank you again for your courtesy in seeing us and discussing the Webber case. You will already have heard from me that the CAUT has postponed the decision on the second stage of censure until the next meeting of the Academic Freedom and Tenure Committee in order to facilitate the exchange of views. I hope that it will be possible for us together to take steps to resolve this issue.

Yours sincerely,
Donald C. Savage
Executive Secretary

November 20, 1979

Dr. Donald C. Savage
Executive Secretary
Canadian Association of University
Teachers
1001 — 75 Albert Street
Ottawa, Ontario
K1P 5E7

Dear Dr. Savage,

Thank you for your letter of 1979-10-29 which I have read with some care and which I have discussed with the President.

Although I could list a number of points of disagreement in respect of the assessment contained in your letter, I believe that to be unnecessary since none of them affects the central argument. That argument is, very simply, that, firstly, Miss Webber's case was heard by an independent Appeals Committee freely chosen by an Appeals Panel which, itself, had been freely elected by the faculty; secondly, that the Appeals Committee so chosen was *de facto* and *de jure* the instrument for the arbitration of disputes such as arose in the Webber case freely chosen by the faculty of this University; and, thirdly, that the University remains unwilling to submit the findings of one arbitrary body to another form of arbitration, not only because to do so would reflect discredit upon the original Committee, but also because it would introduce an element of inconclusiveness and uncertainty into all past and future findings of such Committees.

While this position remains one that we are not willing to reconsider, we are prepared to propose a settlement that would involve the correction of any alleged or perceived deficiencies in the manner in which our Appeals process is now established both in respect of the organizational and functional aspects of that process and we are, of course, prepared to undertake such action in full consultation with the Faculty Association.

I thank you for having given me the opportunity for our full and frank discussion of the issues.

Very sincerely yours,
L. Harris
Vice-President (Academic)

December 6, 1979

Dear Dr. Harris:

Thank you for your letter of 20 November 1979. I regret that you were not willing to respond to the specific points raised in my last letter and that Memorial University remains unwilling to negotiate concerning the case of Professor Webber.

You do suggest in your letter that you would be willing to propose a settlement involving negotiation of new procedures at Memorial and you stated at our meeting that you were in favour of an arbitration procedure. I hope that negotiations on these matters will proceed with the Faculty Association. We would certainly be willing to assist by providing data on arbitration procedures in other Canadian universities. However, your suggestion that a successful negotiation concerning the procedures should close the issue between the university administration, the faculty association and CAUT is not acceptable. You will recognize that in the absence of any proposal to regulate the case of Professor Webber, your suggestion would, in fact, mean that the university community at Memorial University would be gaining certain benefits (better procedures) as a consequence of the Webber case while continuing to inflict harm on her. This does not seem to us to be equitable. However, if the university administration were willing to apply the new negotiated arbitration procedures to the

case of Professor Webber, I think this would take us a long way towards the resolution of the matter.

This seems to me to have become more pressing with the threatened removal of the accreditation of the School of Social Work at Memorial University. A continuation of the policy of the university both in regard to Professor Webber and to the general question of academic freedom in the School of Social Work will simply ensure that the school will not likely regain its accreditation, once lost, and will thus deleteriously

affect the degrees and career prospects of the students involved. I hope that this factor alone would persuade you of the merits of a negotiated settlement.

It is now our intention to move to the second stage of censure in the first week of January. We have been so authorized by the Academic Freedom and Tenure Committee unless there are real prospects of meaningful negotiations on the case of Professor Webber.

Finally, I would like to print our correspondence in the February issue of the

CAUT Bulletin. Do you have any objections?

Yours sincerely,
Donald C. Savage
Executive Secretary

**The Memorial University Faculty Association has indicated that the new procedures under negotiation at Memorial will include an internal grievance resolving mechanism rather than outside binding arbitration as suggested here.*

January 14, 1980

Dear Dr. Savage,

Please excuse the long delay in replying to your letter of 1979-12-06.

I regret that your proposal that we negotiate new arbitration procedures and apply them retroactively to the case of Professor Webber is not acceptable to the University. Nor, I regret, can we agree that



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University of Calabar

1. **Medical School**
Professor, Readers, Senior Lecturers, and Lecturers in:
Obstetrics and Gynaecology
Chemical Pathology
Psychiatry
Radiology
Medical Microbiology
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Paediatrics
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Geology
Mathematics
Physics
Biological Sciences — Senior Lecturers and Lecturers only
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Nigerian Languages
Linguistics
Religious Studies & Philosophy
Theatre Arts
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Senior Lecturer
Lecturers
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Lecturers
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Reader
Senior Lecturer
Lecturers
4. **Department of Mathematics**
Professor
Reader
Senior Lecturer
Lecturers
5. **Department of Chemistry**
Senior Lecturer
Lecturers
6. **Inorganic Chemistry**
Senior Lecturer
Lecturers
7. **Analytical Chemistry**
Senior Lecturer
Lecturers
8. **Department of Geography**
Reader
Senior Lecturer
Lecturers
9. **Department of Building Technology**
Professor
Reader
Senior Lecturer
Lecturers
10. **Department of Land Surveying & Advanced Cartography**
Senior Lecturer
Lecturers
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Lecturer

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Assistant Lecturer
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Assistant Lecturer
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Assistant Lecturer
(e) Biocentrals
Professor
Reader
Assistant Lecturer
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Lecturers
Assistant Lecturers
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Reader
Senior Lecturer
Lecturers
Assistant Lecturer
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Professor
Reader
Senior Lecturer
Lecturers
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17. **Faculty of Education**
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18. **Department of Educational Administration & Planning**
Professor
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Senior Lecturer
20. **Department of Sociology of Education**
Lecturers
21. **Department of Special Education (Physical Handicap)**
Lecturers
22. **Department of Philosophy of Education**
Lecturers
23. **Department of Child Education**
Lecturer
24. **Department of Mathematics Education**
Lecturer
25. **Department of Science Education**
Lecturer
28. **Department of Anatomy**
Reader
Lecturer
Senior Lecturer

27. **Department of Community Medicine**
Reader
Senior Lecturer
Lecturer
28. **Department of Biochemistry**
Professor/Reader
Lecturers
29. **Department of Medicine**
Professor/Reader in Radiology, Psychiatry
Senior Lecturer
Lecturer
Applicants with specialty qualifications in:
(a) Radiology
(b) Psychiatry and
(c) Dermatology preferred.
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Lecturer
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(c) Immunology
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Professor/Reader
Senior Lecturer
Lecturer
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Senior Lecturer
Lecturer
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Lecturer
Applicants required in the areas of:
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Lecturer
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Lecturer
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Professor/Reader
Senior Lecturer
Lecturers
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Professor/Reader
Senior Lecturer
Lecturer
Applicants required in:
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Professor/Reader
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NOTES FROM WASHINGTON

by Clive Cookson

Yeshiva

Faculty unionization at private universities has suffered a sad blow from the United States Supreme Court. By the narrowest possible margin (5-4) the court ruled that the Yeshiva University Faculty Association has no collective bargaining rights because its members are "managerial employees".

The National Labor Relations Act, which guarantees the rights of workers to organize unions and forces private employers to bargain with them, does not cover managers and supervisors. The court's ruling is a defeat not only for faculty associations but also for the national Labor Relations Board, the federal agency which enforces the Act. The board has always held that academics are not managers and therefore that a university administration must negotiate with a union elected by a majority of the faculty, like the Yeshiva University Faculty Association.

Although the ruling applies specifically only to Yeshiva University, a private Jewish institution in New York, it is the first time the country's highest court has considered collective bargaining in private higher education, and the case sets a precedent that other universities may use to resist unionization. The majority opinion, written by Justice Lewis Powell, makes clear that the "managerial" role of academics at Yeshiva would also apply to other "mature" private universities.

A key portion of the opinion reads: "The controlling consideration in this case is that the faculty of Yeshiva University exercise authority which in any other context unquestionably would be managerial. Their authority in academic matters is absolute. They decide what courses will be offered, when they will be scheduled, and to whom they will be taught. They debate and determine teaching methods, grading policies, and matriculation standards. They effectively decide which students will be admitted, retained and graduated. On occasion their views have determined the size of the student body, the tuition to be charged, and the location of a school."

"When one considers the function of a university it is difficult to imagine decisions more managerial than these. To the extent the industrial analogy applies, the faculty determines within each school the product to be produced, the terms upon which it will be offered, and the customers who will be served."

National associations support Yeshiva

The Yeshiva faculty association is an independent union, affiliated to none of the three national organizations that seek to represent college and university teachers, but all three (American Association of University Professors, National Education Association and American Federation of Teachers) had filed briefs on its behalf. Of course their spokesmen expressed dismay at the outcome of the case, although they said they could not predict how widespread its impact would be until their lawyers had analysed Justice Powell's opinion. "What I find particularly troublesome about the majority opinion is how little guidance it gives," said AAUP counsel David Rabban.

The AAUP president Martha Friedman said: "If the Supreme Court decision can be interpreted to apply beyond Yeshiva University, this association can and will seek amendment of the National Labor Relations Act explicitly to provide that faculty members at all private colleges and universities are protected by the Act." Unfortunately, however, it may be difficult for the association to persuade Congress to pass the necessary legislation; the political climate here is cool about unionization.

Boston University first to feel impact

Boston University, the largest private institution with a collective bargaining agreement, is likely to be one of the first places to feel the impact of the Yeshiva ruling. A contract between the university and the local AAUP chapter was finally agreed last Spring, after four bitter years of dispute, culminating in a faculty strike.

Boston University's legal challenge to the union's recognition is still before the Supreme Court, and it will probably have been disposed of before this column is printed. The most likely course of action will be for the Supreme Court to send the case back down to the US Appeals Court for reconsideration in the light of the Yeshiva ruling. Boston University's challenge had concentrated on the right of departmental chairmen to be included in the bargaining unit, but the administration may try to use Yeshiva to put an end to all collective bargaining at Boston.

The Supreme Court ruling does not affect unionization in public colleges and universities, whose employees are subject to state laws, not to the National Labor Relations Act. However there has been some speculation that even here it could have an indirect impact, making state legislatures less willing to give academics bargaining rights. Half of the 50 states still forbid collective bargaining in their institutions.

Of the 230 four-year colleges and universities with collective bargaining, only about 80 are in the private sector. If the Yeshiva decision had gone the other way, the national teachers associations would have seen independent higher education as a major area for expansion in the 1980s, anticipating that declining enrolments and financial stringencies will lead more faculty members to seek the protection of union contracts.

Line between tenured and untenured faculty

All may not be lost, though. Justice Powell's Yeshiva opinion does leave open the possibility that some faculty members might not perform managerial duties and therefore could be protected by the National Labor Relations Act. "It may be that a rational line could be drawn between tenured and untenured faculty members, depending upon how a faculty is structured and operates." If so, smaller bargaining units could still negotiate on behalf of junior academics.

And of course there is nothing in Yeshiva to prevent a private university voluntarily recognizing a union supported by a majority of faculty members. Not every administration is as combative as Boston University. As David Rabban of the AAUP said, some administrators like collective bargaining.

TIAA-CREF to adopt a unisex mortality table for future annuity purchases

TIAA-CREF, the college and university retirement system in the United States, will seek New York State Insurance Department approval of a merged gender, or "unisex", mortality table for use in TIAA and CREF annuities. It was announced recently by Tom Edwards, chairman of Teachers Insurance and Annuity Association and College Retirement Equities Fund.

He pointed out that the 600,000 annuity contracts now in force throughout the system permit changes in mortality tables, and that this new table will take age but not sex into account in determining the monthly annuity benefits to be purchased by future premiums to these and all newly issued annuity contracts. This will mean that men and women of the same age will receive equal monthly benefits for equal premiums paid on the new basis.

The change will not affect payments to persons now receiving annuity income, nor will it affect any future benefits resulting from premiums paid before the adoption of the new table.

"This decision results from the weight of opinion from recent judicial, legislative and regulatory developments, and from concerns of our own participating institutions," Edwards stated. "What's happening," he said, "is that today's social pressures are taking precedence over using the known differences in male and female life expectancies for determining retirement benefits."

The introduction of the new TIAA-CREF mortality table, scheduled for mid-summer 1980, will accommodate this change in policy without affecting commitments made to participants in prior years. It will preserve intact the full funding, full vesting and portability of individually owned annuity contracts used throughout the TIAA-CREF system.

Employer pension contributions, long recognized as a form of wages, have always been equal for similarly situated participants in TIAA-CREF plans, regardless of sex. These contributions, together with employee contributions, have purchased TIAA and CREF annuity benefits over the years at different rates for men and women. Edwards said, "For future service the monthly benefits themselves are now also being viewed by certain authorities as a form of

wages that should be equal, regardless of sex." In his opinion, such an approach to benefits will affect all types of pension plans, both public and private, because all types now use sex-distinct mortality tables in determining monthly benefits for some or all methods of paying retirement income.

How much, if any, difference the new merged gender table will make in TIAA-CREF benefits to be purchased by future premiums will depend on the method of income each participant elects at time of retirement. Most men elect a joint-life income option for husband and wife, choosing between a full or a 2/3 continuing benefit to the survivor. There will be no significant change for these options since they are already based on a joint male and female life expectancy.

For participants who elect a one-life option when they retire, a dollar of future premium will buy more for the women and less for the men than if sex-distinct mortality tables were used. For example, at age 65 the changes for one-life options are expected to range from \$1 per \$100 of monthly income for the option least influenced by mortality rates (life annuity with no less than 20 years' payments guaranteed) to as much as \$8 per \$100 of monthly income for the straight life annuity (all payments cease at the annuity owner's death). The greater the protection elected for a beneficiary, the less the effect of the new mortality table.

Edwards said, "The idea of changing from sex-distinct mortality tables to equal periodic benefits for equal contributions has been a matter of much controversy in and out of the pension and insurance industry for many years. There are still court cases pending and questions to be answered by federal agencies. But now, when participating institutions sum up:

- recent court decisions involving TIAA-CREF and other pension plans;
 - findings by state civil rights agencies;
 - benefit requirements in state and federal legislation; and
 - the new policy directives expected for Equal Pay Act compliance and for institutions to qualify for federal funds,
- they and their national associations see compelling reasons for using merged gender mortality tables in their pension plans."

University of British Columbia

PHYSICS DEPARTMENT

A research associate position or postdoctoral fellowship is available with the plasma physics group. The preferred field of interest is computational studies of laser-plasma interactions. For further details contact A.J. Barnard, University of British Columbia, Physics Department, 6224 Agriculture Road, Vancouver, B.C. V6T 2A8.

The Registered Nurses Association of Nova Scotia invites applications for Nursing Consultant—Education

Duties:

To provide assistance and consultation to schools of nursing, as well as the organization and development of continuing education programs for nurses.

To act as resource person to committees of the Association.

To act as liaison with government, health care and educational institutions and other associations.

Qualifications:

Applicant must be eligible for registration in Nova Scotia. Preparation in education at the Master's level preferred, with at least ten years experience in nursing and nursing education.

Salary negotiable.

Position Available August 1, 1980

Applications with complete resume of qualifications, experience and the names of three references should be submitted to:

Executive Secretary
Registered Nurses Association
of Nova Scotia
6035 Coburg Road
Halifax, Nova Scotia B3H 1Y4

NATIONAL NOTES

by Jill Greenwell (Relations with Government Officer)

Federal election 1980

Many faculty associations again participated in a nation-wide public relations campaign during the recent election. Initiated by the CAUT, the campaign was designed to sensitize candidates to the problems facing universities, and to explain to the candidates of the three major political parties the long-term national and provincial benefits of greater support for research and development and post-secondary education generally.

One such repeat campaign was that organized by faculty at the universities of Manitoba and Winnipeg. Using a 16-point questionnaire based largely on CAUT suggested questions together with a number of items formulated by their joint Election Committee, teams of two or three academics, many of whom had participated in the previous election campaign, interviewed 21 candidates in the seven greater Winnipeg ridings. The detailed answers to these questions were summarized and distributed to all faculty on both campuses well in advance of the February 18 election.

Of the 16 respondents to the questionnaire (6 Liberal, 6 NDP and 4 PC) five Liberals want to see R&D funding levels increased, two candidates suggesting a level of 2.5% of the GNP by 1985 and one 3.5%. All NDP and three PC respondents favour 2.5% by 1985 — the NDP however regard that as a minimum.

All Liberal and NDP respondents favour closer monitoring by Ottawa to ensure that the funds transferred from the federal government for post-secondary education and health care are utilized for these purposes. One PC respondent sees no need for closer federal monitoring while the other two seem to favour an examination of how the funding arrangements are working out.

Virtually all respondents favour comprehensive freedom of information legislation with binding appeal mechanisms through the courts. And virtually all candidates support increased summer employment opportunities for students.

New council responds to CAUT protest

As a result of a protest spearheaded by the CAUT, the Social Sciences and Humanities Research Council is considering the re-introduction of a programme of grants to Canadian universities for Visiting Foreign Lecturers. Cancelled in early 1979 as part of the federal government's fiscal restraint policy (although administered by the SSHRCC, the program was in fact funded by External Affairs), the programme provided about 50 awards per annum to universities wishing to invite foreign professors from all scientific disciplines to lecture and conduct research in Canada. The proposed new programme will, however, be restricted to those in the social sciences and humanities. The council has invited the CAUT to assist in the development of the new programme. Members are therefore invited to contact the CAUT with any comments or criticisms of the old *Invited Professors Programme* which should be raised in our discussions with the council.

1980 world conference for women

A world conference for women organized by the United Nations will be held in Copenhagen, Denmark, from July 14 to 30, 1980. The theme of the conference is "Equality, Development and Peace." The conference will (1) Take stock of what has been achieved in the first five years of the UN Decade for Women, 1976-85 (2) Design a specific action-oriented program for the next five years (3) Examine the tragic situation of apartheid on women in southern Africa and draft special measures for assistance. For further information, contact: Information Officer, DESIDPI — Room 1061-01, 1980 World Conference for Women, U.N. Secretariat, New York, N.Y. 10017, U.S.A. Telephone (212) 754-6868.

Conservatives release confidential study

At the request of the CAUT, the Canadian Federation of Biological Societies, and the Canadian Association of Physicists, the Minister of Science and Technology, Howard Graftey, released details of the MOSST High Qualified Manpower Demand Model just prior to the election. Based on the principles of the CANDIDE econometric model, the study is one of the first major applications of the occupational data collected in the 1971 Census under the Canadian Classification and Dictionary of Occupations. The release of the study will now enable the academic community to assess the underlying assumption of the model. According to the model, which was developed in 1978, if current trends continue, the total supply of researchers from Canadian universities by 1983 will be 18,400, whereas total requirements for that period will be 27,650 — a shortfall of 9,250. In order to reach the 1.5 per cent of GNP objective on R&D spending by 1983, the study also predicts the following demand: federal government — an additional 500, provincial governments — 300, industry — 15,200, and universities — 400.

A sunshine law for Saskatchewan

Saskatchewan may become the last place in the Commonwealth to hold its Public Accounts Committee meetings in camera if a private members bill, introduced by Conservative M.L.A. Robert Andrew, is passed. Based on a similar bill drafted by Ged Baldwin (former federal PC Member of Parliament and long time advocate of freedom of information), Andrew's Bill 47 would guarantee the public's right to government information and create an Information Commissioner with authority to order the release of information held by government agencies. Although Premier Blakeney's NDP government is reported to be resisting the introduction of a provincial FOI act, Mr. Andrew notes that there is growing support for such legislation, particularly from the media and bodies such as the Saskatchewan Human Rights Commission.

More sunshine...

In the spirit of open access to government information, some 2000 research studies commissioned or sponsored by the Secretary of State are being released by the department. Prepared for internal use, much of the material, which deals with such areas as the arts and culture, citizenship, education, publishing, the rights of women, etc., is not in a form or nature which would normally justify publication and general distribution. The department has now decided to catalogue the studies, however, and to make them available through the inter-library loan service across the country. Enquiries should be made to the Library, Secretary of State, Ottawa K1A 0M5.

(NB: The CAUT, in its brief on freedom of information, reiterated its opposition to government-sponsored secret research, and urged that these studies be published and available for scholarly criticism under an FOI act.)

Quebec's new development policy for the book industry

Quebec's Bill 51, enacted before the Assembly adjourned in December and due to come into force upon proclamation, establishes a framework for a provincial development policy for the book industry. Entitled "An Act respecting the development of Quebec firms in the book industry," the legislation requires the provincial government and various public sector bodies (municipal corporations, school boards, general and vocational colleges, private education institutions, public libraries and certain health and social service institutions) to buy books only from accredited bookstores. Eligible for accreditation would be Canadian citizens domiciled in Quebec and corporations wholly owned by such persons.

Only accredited publishers, distributors or booksellers will qualify for government aid programmes. Book distributors and booksellers must comply with government regulations concerning the mode of computing the sale price of books distributed in the province. The Act institutes an advisory board on reading and the book industry to advise the Minister des affaires culturelles (now Denis Vaugeois) on matters he submits to it. The Minister is obliged to prepare a book industry development policy.

Teaching of science subject of study

The Science Council has commissioned a major two-year study into the way students are taught science in this country. The findings of a preliminary discussion paper prepared for the council by James E. Page reveal that the science curricula in Canadian high schools and universities lack Canadian content. He notes not only the need for more Canadian science textbooks but also calls for greater emphasis to be put on teaching the history of science and the role science and technology plays in students' lives.

In its major study the council hopes to assess the health of science education nationally and to stimulate educators at all levels into reflecting on the future of science education in this country. The primary focus of the study will be on teaching science for general education rather than the development of future researchers. In addition to a series of discussion papers, designed to be provocative and stimulative, which will be circulated widely by the council during the coming months, the study will invite the participation of science educators in all provinces and territories, education ministries, faculties of education, boards of education and science teacher organizations in these deliberations. Those interested in this issue are invited to contact Mr. Graham Orpwood, Science Council of Canada, 100 Metcalfe Street, Ottawa K1P 5M1.

Canadian R&D directory

Technology transfer remains one of the major problems of research and development ten years after the Lamontagne Committee found that Canadian expertise was under-utilized. An Ottawa company involved in R&D reporting has now decided to publish a directory of R&D personnel and facilities in this country. The directory will be for sale, and is directed primarily at federal and provincial government departments, private corporations, foreign embassies in Ottawa and Canadian embassies abroad. It will be updated annually. University researchers interested in being included in the directory are invited to send a brief synopsis of their areas of expertise to Mr. E. Littlejohn, Capital Communications Ltd., 77 Metcalfe Street, Suite 306, Ottawa K1P 5L6.

Long term research plan approved in Alberta

As part of Alberta's strategy to build the province's economy and strengthen its technical expertise, the provincial government recently endorsed a long range plan for research and development of its natural resources and industrial capacity over the next 20-25 years. Under the plan, the Alberta Research Council will work closely with provincial universities and industry in carrying out research into energy, agriculture, forestry, transportation, minerals, water, etc., and initiate work in frontier fields such as biotechnology. The objective is to develop and market technology resulting from the council's research, under licensing agreements. Over the next five years, the council's funding is expected to grow by 20 per cent annually (its 1979-80 budget is \$16 million, including contract income) and its staff of 160 scientists is expected to increase to approximately 285 over that period. (Last year the government announced that Alberta's medical researchers would receive \$300 million over the next 10 years.)

The two centuries' old Royal University of Malta, a small but internationally respected university, has been reduced to a virtual ruin over the space of three years. A series of acts of government whose constitutionality is not disputed, is largely responsible. Their impact on academic freedom is of the gravest importance to all university professors and universities and particularly to those in the world's parliamentary democracies for three reasons:

- They show how a democratically elected parliament, granting its majority party a term of "elective dictatorship" (following Lord Hailsham's analysis), can and will direct a university to do society's bidding. This is a prerogative manifestly no longer confined to one-party, unitary states around the world. Events in Malta and like trends in Western Europe generally, show that the most powerful new threat to university autonomy and to academic freedom and tenure is coming from the working of parliamentary democracy itself.

- They illustrate how a government may effectively direct a legally autonomous university by legislation, by administrative process, by choosing to finance only those activities of which it approves, by controlling the appointment and dismissal of its staff, the admission of students, the appointment of members of its governing body and the demand for university graduates; and by refusing to accord consultative and negotiating rights to trades unions in the education sector.

- They flout certain international, unwritten conventions amounting almost to Common Law, which delineate the rights and responsibilities of governments and universities respectively and which enable both parties to identify and respect the "precarious balance" between social interest on the one hand, and the ethic of unfettered pursuit of knowledge for its own sake. The need for an international "university charter" incorporating these conventions is urgent.

From 1947, the Royal University of Malta (R.U.M.) enjoyed considerable autonomy under a Government "block grant" system which gave it wide discretion to teach and to research. Tuition was free. According to Professor Peter Serracino-Inglott, former Dean of Arts, circumstances began to change in 1971 when the present ruling party came into power. A special Government Commission chaired by Professor Ralph Dahrendorf (former Commissioner of the European Communities and now Director of the London School of Economics), reported in September 1974 that in addition to the pursuit of academic excellence, the university should measure its academic achievements "in terms of the relevance of its efforts to the Country's needs". To remove doubts as to who was to identify the country's needs, they proposed that the Council (governing body) should be of eight members appointed by Government and eight from the University plus a chairman who was to be an "independent person chosen by the Chancellor on the advice of the Prime Minister". The Council was to facilitate a continuous dialogue between Government and University from which policies to achieve excellence with relevance would emerge. The "precarious balance" would thus be struck.

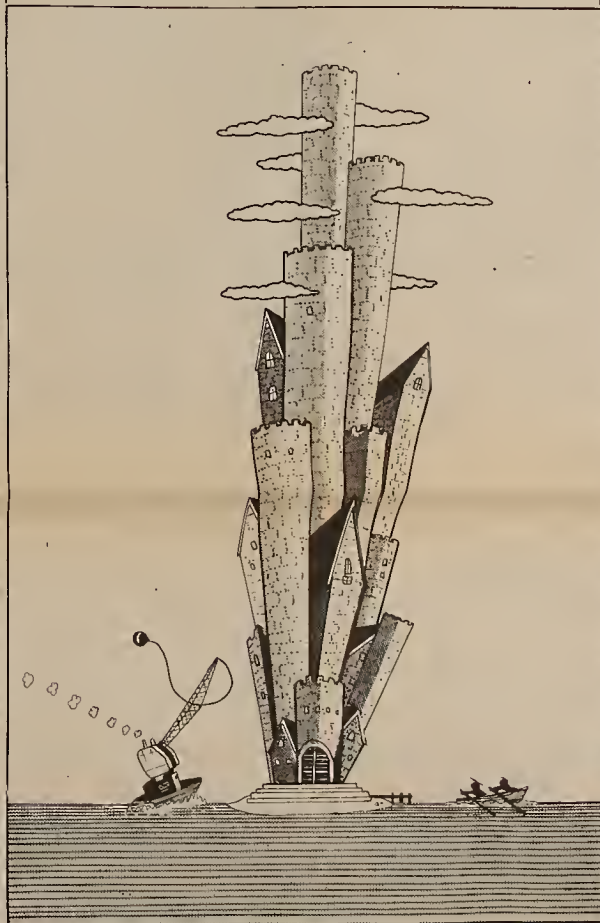
An Act swiftly followed. It gave Government narrow control of the Council "Academic matters", statutes and regulations concerning them were not to come into force until assented to by the Chancellor (the President of the Republic) "acting on the advice of the Prime Minister" — which proved to be freely available.

In the next three years, progress was made in some of the areas Dahrendorf had picked out, notably, the development of extra-mural social science courses including

"New" University for "old".

Academic freedom erodes in Malta

by Donald E. Varley



Graphic — Tom McDonald

management and industrial relations, Mediterranean studies and Marine studies. But experience showed that "dialogue" was difficult to engage in and that the balance of forces was tending to move towards the government axis.

Things seem to have come to a head in 1977. Malta is a small island; its population in many ways resembles an "extended family". Hence, the major dispute between government and the medical profession which broke out in June 1977 immediately involved everyone. It soon deepened into a strike/lock-out. Into it were drawn the University's clinical professors, who have joint appointments both to practise and to teach medicine and with them also their university academic colleagues, the profes-

sional associations and the students' union.

In this tense atmosphere, the Government chose to launch its controversial "Work-study" plan for tertiary education. In October 1977, the Prime Minister asked the academic staff of R.U.M. to prepare proposals the aims of which were (i) to make courses and structures more vocational, and (ii) to introduce "study-work". In little over a month the Prime Minister had a detailed draft. It is constructive, outlines alternative strategies for achieving the two aims; and it says how they could be put into effect and what resources would be needed. But it insists on the retention of substantial provision for "non-vocational" courses in humanities and science and resources for free research. So far as is

known, this table draft was not even acknowledged let alone taken up in continuous "dialogue".

Meantime, and as the government hastily prepared legislation, the Royal University was suffering grievously. Though nominally on a "rolling" triennium system of finance, from 1977 it had no formal budget. Funds from the Ministry came month-by-month and uncertainly; discretion in some areas was removed to the civil service — for example, orders for even small equipment items had to be submitted for detailed scrutiny; prices were rising but funds were not so real resources fell; state intervention characterized by short-run bursts and shifts, was making it nigh impossible to plan ahead; approval for vacant posts to be filled was denied or delayed; government members of the Council became reluctant to use their judgement, often leaving meetings to get telephone briefings; government used formal channels and increasingly also unwritten instructions, indications and pointers, some delivered to the Rector and his officers, some given out in broadcasts, on television or in the press. Morale plummeted, staff began to quit.

At this time, ATRUM, the association at R.U.M. merged with the powerful Malta Union of Teachers, (it has since been obliged to drop the word Malta and calls itself now: the "Movement of United Teachers"). Now M.U.T. is a member of a confederation of independent associations and trades unions, mainly in the skilled and professional field, to which the medical association also belongs. To M.U.T.'s astonishment, the Government declared that because M.U.T. supported the medical association in the continuing dispute, it could not formally consult or negotiate with M.U.T. or with other confederation unions, not even on issues totally unconnected with the medical dispute. It was hinted that teachers would be better off in the rival, ruling party-linked general workers' union.

Thus, at the moment when colleagues at the ailing Royal University most needed the protection of their professional association, M.U.T. was unilaterally denied formal recognition. This stance has been roundly condemned by the World Confederation of Organizations of the Teaching Profession (representing 5 million teachers prominent among whom are Canadian teachers) and by I.A.U.P.L. amongst other bodies, as well as in open forum and in the Press in Malta. It is indeed the most serious and most disturbing of the harmful measures taken by the government.

In July 1978, an Amendment Act resolved many uncertainties but restored no freedoms. On the contrary, it reinforced Government's right to identify and pursue national goals through institutions of higher education and it articulated a new policy — the "worker/student" scheme. The Royal University was replaced in truncated form by the "Old University" and the "worker/student" scheme was given to the former Polytechnic which now became the "New University".

Under the scheme students take vocational courses, 6 months periods of study alternating with 6 months at work. During both periods they are paid at levels set by Government. It is the responsibility of employers both public and private, to sponsor candidates for places and, for that reason, it was thought likely that a job would follow completion of the course.

Sponsored studentships and "thin" sandwich courses are well-tried and accepted elsewhere, for example in U.K. universities. In principle, work must be integrated with study, but in Malta this was neither required nor achieved in the first run. A number of design problems were articulated by Professor Dahrendorf, who, in resigning from Malta's higher education Commission in May 1978, sent an open letter to the Prime Minister describing the plan as unworkable. "Others in the world have tried it," he wrote, "It produces either unhappy workers or under-qualified students or both. It adds nothing to education or to social integration". This broad-

Professor Varley is Chairman of the European Liaison Committee of the International Association of University Professors and Lecturers (I.A.U.P.L.).



DALHOUSIE UNIVERSITY

VICE-PRESIDENT (ACADEMIC)

Applications and nominations are invited for the position of Vice-President (Academic), Dalhousie University. The University has nearly 9,000 full- and part-time students and 1200 full- and part-time academic staff in Faculties of Arts and Science, Administrative Studies, Health Professions, Law, Medicine, Dentistry, Graduate Studies.

The Vice-President (Academic) is responsible to the President, and works with the Deans of Faculties in administration of academic and research policies of the University. Candidates should be established scholars with qualifications appropriate for senior faculty appointment, and experienced in administration.

The appointment is normally for a term of 5 years and commences 1 July 1980. Applications should include biographical information and the names of three referees. Applications and nominations should be submitted by 30 April 1980 to:

Search Committee, Vice-President (Academic)
c/o Dr. L.C. Steeves
Office of the Dean
Faculty of Medicine
Dalhousie University
Halifax, Nova Scotia
B3H 4H7

University of Regina Department of Computer Science

Applications are invited for a faculty position in the Computer Science Department at the University of Regina. This expanding Department is seeking individuals with expertise in Operating Systems, Programming Languages or Computer Systems, but applicants with other active interests will also be considered. Depending upon qualifications and budget allocations, a term or probationary appointment may be made at the rank of Assistant Professor effective July 1, 1980. The 79/80 salary range is \$18,829-\$27,307.

The Computer Science Department presently has nine full-time faculty members, two laboratory instructors, one technician and approximately 1,000 students enrolled in its classes. Current faculty interests include: Approximation Theory, Modelling, Graphics Hardware, Software Engineering, Document Retrieval, Data Base Management Systems, Artificial Intelligence, Theory of Computing, Mathematical Software, Business Systems, Performance Measurement, Programming Languages, Computer Assisted Instruction and Software. The Department has four computing laboratories containing a variety of mini computers and micro computers for instructional and research activities, and the University has a Honeywell Sigma 9 on campus as well as telecommunications access to a 370/158, a 370/168 and a 3032.

Enquiries and applications should be directed to:

Dr. L.R. Symes, Head
Department of Computer Science
University of Regina
Regina, Saskatchewan, Canada
S4S 0A2

side has not deflected the Government. Indeed it has vigorously pointed out that Malta is a small community which must gear high-cost tertiary education outlay to economic development and man-power needs. This has been achieved at the cost of eroding academic freedom in two ways: first, selection of students is not in the institution's hands, it is done by a government-controlled selection board; second, it has been made clear that "pure" research cannot be afforded and that socially-useful research only is to be approved. Staff will not be required to research and will not be free to research — except by obtaining leave to study abroad. Sweden is alone in Western Europe in having removed the research requirement from University staff ("full" professorships excepted.). So far!!!

If the "New" was to survive, the "Old" was already doomed. The 1978 Act amputated medicine, dentistry and pharmacy — they went to the "New" despite orchestrated staff and student protests. Power to confer engineering degrees was transferred likewise. Theology ceased to exist; social sciences, so recently encouraged by the Commission, were axed and the pieces grafted on to business studies, educational studies courses and others at the "New".

Arts and sciences were the next to fall. At first, students entering "Old" courses were required to pay tuition fees; formerly there were none. Against the competition of a wage-financed, job-oriented course at the "New", it would seem the "Old" could not attract a viable entry. Enrollments were indeed "virtually nil" for the Session 1978-9. Only the students in second and senior years were left. However, great efforts were made by various parties to find money — much of it flowed in from abroad. M.U.T. claims there was enough to fund a viable entry for 1979-80. But on 5th July, almost exactly a year after the Amendment Act, M.U.T. had to announce in a Press release the "Government's decision to stop entry of new students into B.A. and B.Sc. courses of the Faculties of Arts and Science".

Law is now alone.

In Parliament, even Opposition spokesmen have now come to the view that Malta cannot afford two universities.

So perishes an internationally respected, independent university and in its place arises a "comprehensive", socially "relevant", planned-manpower manufacturing — serving the "elective dictatorship".

What has become of our university colleagues in Malta? Of course they have lost or will lose their jobs. Many of them have found posts abroad; others have been obliged to accept inferior conditions at the "New" and others still are workless. Their

union, M.U.T. has not been allowed to negotiate new contracts for them nor severance terms. There are few, if any, who think their sacrifices worthwhile.

In sum, academic freedom has been eroded; first by government denial of trades union rights to M.U.T.; second by enactments giving government de facto control of its higher education institutions' governing bodies; third, by intensifying financial controls; fourth by controlling student selection; fifth by virtually suppressing "not useful" research; sixth by linking demand for university places and graduates closely with economic planning and man-power needs; and last, by axing arts, "pure" science and certain key social science courses, and thus the theoretical foundations of "applied" studies.

Any who may conclude that events in a tiny democracy far away are regrettable but not relevant to their own condition ought first to study the de Moore Report on "Diversification" of Tertiary Education (1978) to the Council of Europe. Seven West European democracies are surveyed and there are some chilling items: security of tenure is questioned; and it is argued that research is not essential to good teaching, specifically of first year courses; these are just two.

Two of the four goals of government policy for higher education should be "preparation for the labour market" and "the advancement of knowledge". But it is inferable that in all seven countries, university teachers are responsible to administrators, financiers and public accountants rather than to the kinds of academic managers who would best understand how to reconcile the two.

Remarkably, the reporters are not bureaucrats, they are university professors engaged by and reporting to Ministers.

In 1940, the American Association of University Professors gave us an invaluable "Statement of Academic Principles" containing the affirmation that the free search for truth is consonant with the public good. So long as free societies did not question this felicitous conjunction of academic and social objectives all was well. But parliaments, governments and people are questioning. Tax-payers, parents, unemployed graduates, those who recognize that the universities and colleges train the key professions are all alert.

The people in Parliament have become today's greatest threat to academe.

Their cry is for relevance, economy and accountability.

It is urgent and imperative that we draw up an "International Statement". I.A.U.P.L. has just launched a project. Will Canada help us?

VISUAL ARTS

The Division of Fine Arts at Lakehead University has received approval to offer a full time teaching appointment at the Assistant Professor level in the area of Visual Arts commencing July 1, 1980.

Qualifications:

M.F.A. degree with a major in Drawing and Painting; Strong professional background; Teaching experience at the University level.

Other, Sessional Lecturer (part time) positions may become available in Basic Design, History of Canadian Art, Photography, Drawing, Painting and Contemporary Art Criticism.

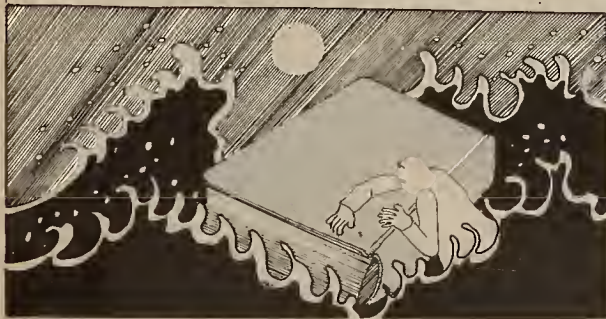
Candidates must submit full resumes, all supporting material including slides and three letters of reference by April 1, 1980 to:

Mr. Donald E. Ayre
Secretary of the University
Lakehead University
Thunder Bay, Ontario
P7B 5E1

Lakehead University

Publish for the parish — and perish

by Lewis Wolfgang Brandt



I have been fortunate enough never having had to publish in order not to perish as an academician. On the other hand, I enjoy research and writing and like to publish so that my ideas will not perish. My main concern has, therefore, been to have them accepted among those colleagues who did not already share my views, i.e. outside my parish. Thus, I tried to investigate the process by which various psychological journals select manuscripts submitted to them.

A colleague once told me that he refereed manuscripts for half a dozen psychological journals. This made me wonder: "What is the likelihood that a manuscript rejected by one journal is reviewed again by the same referee when it is submitted to a second journal?" My first approach to this problem consisted in investigating to what extent there exist interlocking consultancies on editorial boards of psychological journals.

A comparison of the names listed as editorial consultants or members of the editorial boards of 40 psychological journals revealed that two psychologists each were listed on 5 and 4 journals respectively and the names of 11 further psychologists appeared each on 3 journals. Before calculating however, the rather useless statistical probability that a given manuscript would reach the same referee via Journal B who had rejected it on Journal A, I realized that there was no clear-cut indication that these consultants were also referees. My own experience as consultant editor on 2 journals had shown me that the names so listed on professional journals may be no more than window-dressing. (E.g. the *Psychiatric Journal of the University of Ottawa* lists 8 editors, 14 "Journal Management Committee" members, 101 "Editorial Board" members from 8 different countries — and published 28 articles in 1978!) Over the years I had not only never been consulted on any editorial policy by any of the journals which had listed my name as a member of their editorial board but these journals had also never sent me a manuscript for evaluation. On the other hand, I had received manuscripts for refereeing from various journals which did not list me as consultant editor or editorial board member. My only experience with the journals on which my name appeared had been that they had never rejected any of my manuscripts.

I decided upon a more direct approach and designed a simple questionnaire which I

sent to the editors of 27 psychological journals. I asked the editors to indicate the number of editorial board members, the number of manuscripts received during the past twelve months, on how many of these the editor alone had made a decision, how many had been sent to members of the editorial board, how many to other reviewers or referees and finally how many manuscripts individual members of the board had received. Of the 27 professional journal editors to whom I sent the questionnaire, 9 completed the form and 3 sent a reply without completing the form. I never heard from the remaining 15 colleagues.

Even the small number of replies I received demonstrate that there exists a great variety in the ways in which only psychological professional journals operate — not to speak of others. Particularly enlightening were the annual reports by the editors of 2 of the journals I had approached. The great variety of ways in which manuscripts are handled is expressed perhaps more clearly by 2 editors, each of whom received about 220 manuscripts within one year. One of these editors decided single-handedly on the fate of 9 of these manuscripts whereas the other one decided alone on 79 of the manuscripts received. An editor who reported having received 82 manuscripts during a six-month period reported having rejected 45 of them single-handedly. Another editor reported that he and an associate editor had made decisions on 54% of all manuscripts received. While all of the journals reported having used many outsiders as reviewers, only 1 of the journal editors had not sent any manuscripts to half of the editorial board members and estimated having made decisions single-handedly on two-thirds of all manuscripts received. Of the 52 members of one editorial board, 9 received 10 or more manuscripts for evaluation, while 7 received none. While one editor reports only accepting manuscripts alone, another one reports only rejecting manuscripts without further consultation.

These findings, based on relatively small numbers of replies from editors of professional psychological journals, correspond to my own experiences. Several of my articles were accepted so promptly that they could hardly have gone beyond the editor for acceptance. In one instance I met an editor personally and asked him whether he would be interested in an article on which I was working. He wished to see the draft which I had with me. After quickly glancing over it he said it just fit into the new issue he

was getting ready and he would publish it without giving me an opportunity to make the changes I had intended. At the other extreme, I submitted an article to one journal to be referred to a second one by the first editor. The editor of the second one suggested that my article would well fit into the first journal. As this experience, which certainly was not unique, indicates, even W. John Harker's (*CAUT Bulletin*, September 1979, p. 4) colleagues are not always able to follow his advice of identifying "the focus and emphasis of the particular journal" under consideration. Obviously I did not succeed in answering my original questions, namely what the likelihood is that one and the same referee rejects twice the same manuscript. What both my research findings and the individual experiences by myself and many other writers (cf. Michael Hardy, *CAUT Bulletin*, April 1979, pp. 15-16) indicate is that there exists a great variety of ways of handling manuscripts, so great of a variety that one can hardly speak of a "scientific", "objective", "rational" selection process. It may be more appropriate to consider refereeing for professional publications as just one of many human activities. As such, it is subject to all of the influences to which all other human activities are subject such as tastes, prejudices, mutual back-scratching, pressure groups, etc. Each scientific parish publishes what fits into its dogma and ritual and tries to keep reforms and heresy out.

Some journals have introduced

anonymous refereeing: reviewers are not given authors' names. (These can though frequently be guessed from the references.) It might be better, if referees had to identify themselves to authors. The question I could not answer with my research could then be answered and refereeing might be handled more responsibly than it often is now.

However, as long as number of publications — irrespective of their relevance to either new knowledge or pertinent problems in our society — is used as a criterion for salary increases, the granting of tenure and promotion, there is little hope for raising the quality of publications in the sciences and in the arts. The constant increase in the number of journals will continue as long as we have forests which can be turned into pulp. Each publication will be read by fewer and fewer people, since the number of words each one of us can read per day has an upper limit. More and more information will be stored in computers and less and less will reach human minds.

One result of this publication explosion is a vicious circle, i.e., insanity. As each of us can read less of the total number of publications in his or her area there is more and more duplication of which I could cite many specific examples. Probably this publication is paradoxically another such example.

Dr. Brandt is with the Department of Psychology at the University of Regina.



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Un dialogue de sourds

par F.M. Goldstein

Conditions d'un dialogue

Tout dogme, et surtout toute discussion contradictoire, n'a la moindre chance d'atteindre le stade d'une conciliation finale, si les termes employés par les protagonistes ne sont pas bien définis, c'est-à-dire si les parties en présence ne sont pas d'accord sur leur signification. Telle est la situation de ce dialogue plus de deux fois millénaire, entre les professionnels de l'enseignement et la communauté, qui est leur patron collectif, et, à ce point de vue, les provinces du Canada ne font pas exception. Si le manque de précision des concepts éducatifs était seulement un malentendu d'ordre philosophique, la situation serait supportable. Mais, puisque dans le monde moderne en général, et au Canada en particulier, cette situation mène à un malentendu de plus en plus aggravé, il serait méritoire de passer en revue les termes équivoques, cause de toute divergence courante en éducation, et résultant en revendications nombreuses des enseignants.

Prenons donc un répertoire limité de ces termes ou stéréotypes, employés tant par les enseignants que par l'homme de la rue, et, avec un sérieux, dont la source se trouve dans le bon sens individuel, analysons les aspects contradictoires, parce que diffus, de cette terminologie de l'éducation et de la pédagogie de nos jours, qui influencent et colorent les réactions communautaires aux

problèmes de l'enseignement.

Tout d'abord la notion dominante d'*Enseignement*, qui, à l'heure qu'il est semble être une référence à un style didactique osmotique par lequel l'enseignant, agissant devant un groupe d'étudiants *"transmet"* (un mot de caractère littéraire, très imprécis et très apprécié pour sa suggestivité) *"des connaissances."* Et, bien sûr, cette *"transmission"*, qui se fait à merveille par un *"bon professeur"* résulte en apprentissage, spontané et immédiat, par un effet que l'on ne saurait appeler qu'*"osmotique"*, car il est inexplicable. Comment a-t-on pu arriver à cette situation incroyable, et peut-être amusante, si elle n'était pas la source de profonds malentendus?

On a eu tout d'abord plus de deux millénaires d'enseignement traditionnel, ce qui se confond chez nous, grâce à une propagande désespérée des ministères provinciaux payants, avec une sorte d'inertie indéracinable, que les parents—généralement heureux avec le *"système"*—ont en horreur et lui préfèrent les orientations *"nouvelles"*, dont on parlera plus loin. Rien que pour mettre cette situation dans une perspective réaliste, disons que l'*enseignement* est un domaine d'intérêt diffus, tandis que sa contrepartie, l'*apprentissage*, est un domaine d'intérêt défini et qui fait partie de la psychologie expérimentale. Nous voulons dire que, tandis qu'une expérience d'enseignement reste

unique et incommunicable—de nos jours on apprend encore à enseigner par des stages de pratique directe dans les écoles—l'apprentissage tendrait à être passible d'une étude plus appropriée, relativement scientifique. Cependant la psychologie expérimentale étudie des concepts simples, en conditions schématiques de laboratoire. Qu'y a-t-il de commun entre un comportement réduit à sa limite conceptuelle et le comportement complexe d'un individu ou d'un groupe en salle de classe? Comment généraliser en partant d'un comportement dont la compréhension n'a pas de signification pour *"l'acte d'enseignement"*? Comment extrapoler d'une expérience basée sur un élément simple ou simplifié à la limite, pour mieux comprendre la complexité d'une situation en salle de classe? Le fait reste incontestable que l'expérience d'enseignement de nos meilleurs professeurs n'a pas été conceptualisée et que, pour orienter les jeunes candidats de la profession, nous n'avons que deux moyens:

- a) l'analyse explicative, un procédé littéraire (à quoi sert de comparer, si on n'a même pas établi s'il y a une *"comparabilité"*);
- b) l'espoir de voir cette expérience accumulée des générations enseignantes précédentes donner aux candidats une poussée dans la bonne direction.

Il serait bon d'affirmer, malgré toute hésitation logique, que le moyen (b) *marche* et que, depuis Platon, que l'on veuille se baser sur la maïeutique, ou bien sur *"l'illumination divine"* de St-Augustin, sur les impératifs catégoriques Kantien, sur les rigueurs herbartiennes tellement chères aux Prussiens, ou sur les *"nouvelles méthodes"* (applications didactiques du pragmatisme, c'est-à-dire d'une école de pensée fondée sur l'*action*; voir *"learning by doing"*), tous les systèmes d'éducation ont été raisonnablement efficaces, acceptables et acceptés par des communautés spécifiques,

d'une multitude de locations géographiques. Et cette constatation devrait suffire pour souligner l'importance d'un enseignement et d'un apprentissage conjoints, de nature traditionnelle, car, ne l'oublions pas, l'école traditionnelle la première a établi que tout être humain était capable d'amélioration. Ceci nous semble un fondement solide sur lequel on peut construire sans crainte, que l'on soit ou non en faveur de cette profession de foi.

A l'heure qu'il est, la communauté semble réduire l'enseignement à la gestion, par un instructeur, d'une situation d'enseignement et d'apprentissage. Cette définition, colorée par l'esprit pragmatique de l'anglo-saxon, répugnait à l'esprit latin. De la même façon, affirmer que *"l'apprentissage est un changement de comportement causé par une expérience"* ne satisfait pas l'exigence logique de l'esprit latin, car il devient évident que le terme *"expérience"* pourrait inclure une multitude de nuances, s'éloignant ainsi de tout ce qui ferait l'intérêt de *"l'acte d'enseignement"*. Nous voilà ainsi tout aussi éloignés d'une définition acceptable de nos deux premières notions qu'au début de cet article; nous préférons nous arrêter là-dessus et passer à l'analyse des *"nouvelles méthodes"* un autre terme inapproprié et mal compris dans notre communauté.

Les nouvelles méthodes pédagogiques: la découverte.

Nous croyons avoir mis en valeur le point de la *modernité* ou de l'*actualité* des méthodes pédagogiques, qui se trouvent ainsi être toujours ou moins *"nouvelles"*. Ce qui pèse lourd dans le manque de compréhension des parents dans la matière est une conséquence fâcheuse de l'abus d'un jargon pseudopédagogique, où *"les*

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BOOKS. LIVRES

Mackenzie King: Widening the Debate, edited by John English and J.O. Stubbs. Toronto: Macmillan, 1978. \$14.95

Any publication that purports to widen the historical debate on Mackenzie King must surely be welcomed by those who have too long been exposed to the idea that he was a short, pudgy, unimpressive leader who destroyed the British Empire and allowed Canada to fall under the influence of the United States. In recent years, we have seen revealed through the opening of the diaries an increasingly complex character: one that does not fit previous interpretations. English and Stubbs' *Mackenzie King: Widening the Debate*, a collection of essays, some drawn from a 1973 symposium and some commissioned especially for the volume, promises to draw together the best of current research, using new approaches based upon a "wealth of evidence" to give us new perspectives on Mackenzie King. Unfortunately, this book fails in large part to deliver on its promise.

In the introductory essay, entitled "Mackenzie King and the Historians," Blair Neatby reviews the state of Mackenzie King historiography. He notes that King and his political decisions have done more to shape the character of Canadian development in the twentieth century than any other individual. However, the prime minister who governed Canada for more than twenty years is far from becoming a national hero. This is a country that is essentially a political creation which survives by compromise and diffusing regional and cultural differences. It cannot have national heroes. Anyone who judges King's political leadership in terms of the national state ideal will naturally see him as unimpressive and ineffective. It is time, Neatby writes, that historians recognize another more appropriate standard of political leadership born out of the concepts of conflict-resolution, balance of power and compromise.

Several of the essays in *Widening the Debate* either study Mackenzie King's personality or seek to explore his social or political philosophy. John Courtney in his "Prime Ministerial Character: An examination of Mackenzie King's Leadership" uses an analytical theory to examine King's self image, his world view and his style. Courtney concludes that King was an "active-positive" politician whose political ambitions were manifestations of his mother's; that he had the capacity to shun excessive preoccupation with personal disappointments; and that King desired a social and natural harmony within an organic whole.

Stephen Scheinberg examines the period of King's employment by the Rockefellers in order to define the role of the reformer in a capitalist system. He observes that King was able to fulfill his role as a ruling-class intellectual by rationalizing the use of force or otherwise ameliorating conflict as he did by supplying Rockefeller with the ideas of labour democracy.

In his essay, "Mackenzie King and American Progressives," Keith Cassidy examines the parallels between King's social philosophy, as expressed in *Industry and Humanity*, and those espoused by American Progressives. Cassidy observes that while there is evidence of similar concepts, many of King's ideas run counter to social philosophies of the Progressives. He concludes that King adopted ideas from others which were then modified to fit his political experiences and religious convictions.

Fails to deliver on its promise

by William Smith

tions.

The three essays mentioned above present new approaches to the study of Mackenzie King; but an examination of their primary sources reveals an overwhelming dependence on either the diaries or King's own book, *Industry and Humanity*. In Scheinberg's essay, the author admits that his research was based primarily upon previous biographies and studies, after which he checked the primary sources. Courtney's analysis is dependent upon existing biographies, but his list of sources indicates that he also used transcripts of the original diaries. These transcripts have had portions relating to King's personal life removed, and therefore are unsatisfactory for a study of this nature. Cassidy's essay

draws heavily upon *Industry and Humanity* as its primary source. It is a source that Scheinberg concludes as "well worth neglecting."

These authors had the opportunity to consult complementary sources within the Mackenzie King Papers to supplement their research. Scheinberg would have found valuable documentation on King's labour work in the Rockefeller Foundation and industrial disputes files in the Notes and Memoranda Series. The Speech Series in the King Papers contains many speeches on labour relations from 1905-1919, providing a continuous documentation of his thought. It is unfortunate that Cassidy did not consult the same Notes and Memoranda Series for King's university notes on

political thought as well as his rough notes for *Industry and Humanity*. In a criticism of Courtney's essay published in 1976 in the Canadian Journal of Political Science, J.E. Esbrey disputes the use of the positive-active theory and uses letters found in the Family Series to show that some of Courtney's conclusions are substantially wrong: King's mother appears very much as a negative force, and King himself expresses real worry and tension at making decisions. An examination of the diary for the 1930's and 1940's shows King under constant self-doubt, tension and pressure, which in turn explains his need and use of spiritualism. These are not the traits of Courtney's "active-positive" leader. The main failing of these essays is not in their use of new theoretic approaches, but rather in their fundamental misuse of the primary sources at hand, coupled with the unawareness of complementary sources.

The remaining essays present a more balanced use of available sources. The King diary is again extensively used but in each case is supplemented by other sources from within the King Papers or in other records. The diary is used to provide the narrative, confirming the substance of events rather than as an analytical tool to examine personality and belief.

William McAndrew examines King's view of Roosevelt's New Deal policies and comes to the conclusion that King had serious reservations as to their ability to change existing economic conditions and worried about their effects on Canada. McAndrew observes that King and Roosevelt differed fundamentally in their concepts of reform and how it should be carried out.

Jack Granatstein's essay, "King and His Cabinet: The War Years", examines King's ability to resolve conflict within the Cabinet, and to manoeuvre cabinet ministers while always remembering regional, cultural and racial differences. Granatstein shares Neatby's suggestion to see Canadian political leadership in terms of conflict resolution. He focuses on King's inability to appoint a Jewish minister due to Quebec opposition, or the means by which King manipulates Ian Mackenzie into resigning as Minister for National Defence and accepting another portfolio. Granatstein concludes that King was far from being an unimpressive and inactive prime minister for he could ruthlessly manipulate his cabinet to preserve his political leadership.

In Norman Hillmer's study of the 1937 Imperial Conference we find a re-evaluation of the thesis that King sought to thwart the work of the Conference. Hillmer believes that King's motives were much more complex, involving the desire to produce an economic conciliation between the United States and Great Britain while protecting Canadian interests.

In Robert Bothwell's study of the struggle for national health insurance legislation, Mackenzie King occupies the background, his presence providing only the historical context for the essay. In this essay we see the dynamics of the King government against the inter-play of bureaucrats and politicians as they initiate, study, revise and then fail to bring in to being health insurance legislation. Bothwell's approach is symbolic of an increasing number of historical studies of the Mackenzie King era where the King Papers as well as available federal government records are now being used extensively to study the period in exacting detail, without Mackenzie King at centre stage and as the sole actor. If historians accept the call for revisions in their

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Fails to deliver ...p. 25

historical approach or use of research tools we will gain a greater appreciation of all the social, economic and political forces at work in the MacKenzie King era.

Recent historical research into Mackenzie King is cursed by two related phenomena: the first is the long standing belief that King was an "incredible Canadian". This somehow endows him with distinguishing traits that would go far to explain our history. It has led historians to concentrate on Mackenzie King himself, rather than other, equally important historical forces. The second is the increasing emphasis on the King diaries as the primary source to study the man and the period. According to C.P. Stacey, "it is the most important single document in twentieth-century Canadian History".

But, there are certainly limitations to any diary as a primary source and few have used it without recognizing its limitations. Though Blair Neatby has noted that while it is an excellent source it is "Less trustworthy" when discussing King's own motives, none have questioned how other sources might be available to assist in correcting error or separating rationalization from fact. Such concerns must be addressed before this primary source can be used effectively by historians.

As *Widening the Debate* clearly shows, the call for more professional studies of Mackenzie King does not solely depend on new approaches in historical technique. Revisions in history require the effective interpretation of existing primary sources, and the search and integration of complementary sources. The essays in *Mackenzie King: Widening the Debate* fail or succeed on that very point.

Timely and informative discussion

By Max von Zur-Muehlen

Carl V. Patton, *Academia in Transition: Mid-Career Change or Early Retirement*, Abt Books, 55 Wheeler St., Cambridge, Mass. 02138. \$19.50 (U.S.)

A few months ago, a book was published in the United States, which has a great deal of relevance to the present and future Canadian university scene. Since the experiences of the United States often precede developments in Canada, the trends outlined have a bearing on the Canadian university community.

Academia in Transition: Mid-Career Change or Early Retirement is an examination of these two dimensions of university life in the United States, which are assuming greater importance. In the sixties and early seventies the "faculty realized professional gains: social prestige, greater job mobility, more self-regulation, and greater influence in academic governance." But with declining enrolment, the situation has changed:

There seems little cause for optimism given...the hard facts about prospects for

higher education. More importantly, however, faculty gloom seems to result from the dissonance in their lives between their expectations for their academic careers and their actual career paths. For most academics, higher education no longer promises the excitement of prestigious careers, rapid advancement, and professional prerogatives that it did through the 1960s.

Since literature on early retirement and career change is limited in Canada, this study is mandatory reading. But it is a pioneering venture, and as such should be regarded only as a beginning for comprehensive analysis, and an indication of the need for further empirical investigations. Patton's study itself is primarily based on questionnaires and interviews between 1976 and 1977, and a more recent review of the literature.

On the subject of early retirement, *Academia in Transition* provides an overview of the options available at American universities, and comparative information from the private and public sectors. Patton stresses the need for financial incentives to create an environment for early retirement,

and describes experiments with various schemes.

A possibility, which according to the author has a great deal of merit, is severance payment to encourage outward mobility. "In that way, at least, the total cost of the extra payment is known in advance" (p. 47).

He also suggests that those who retire early might be given opportunities for part-time employment, and some of the benefits associated with faculty appointment, such as library and parking privileges.

One of the primary reasons for encouraging early retirement is rejuvenation of the faculty as older members leave and are replaced by young Ph.D.'s. However, Patton admits that ultimately "incentive early retirement would have a limited effect on the age structure of academia" (p. 116).

As Patton observes in a more recent paper:

When the first group is induced to retire earlier than planned, an increase in the retirement rate is naturally experienced. However, after this initial group of persons is retired, and even if the inducements are continued and encourage the same proportion of persons to retire earlier than planned, the overall retirement rate will return to approximately the pre-incentive plan level as persons who would have contributed to the overall retirement rate are not around to do so because they were induced to retire early.

Equally troublesome is the question "...Given the proper incentives, will the least productive and most disaffected academics agree to retire early?" (p. 81). In a number of instances, however, high hopes for early retirement programs have not materialized, because costs and barriers were formidable.

Nonetheless, for the individual, early

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Timely and informative ...

retirement may be a happy outcome. Patton reports, "98% of the early retirees said they were either satisfied or very satisfied with their decision..." (p. 64).

Patton's discussion of mid-career change in academia seems less comprehensive because of the newness of the subject and the fragility of the data. He analyses the factors that cause American university faculty to change careers in mid-life, but confines himself only to those programs that have been implemented for currently employed academics. Others, however, are now underway or planned: the proposed program funded by the National Science Foundation for "young scientists" who have been unable to obtain a research appointment, and programs already developed with support from the National Endowment for the Humanities to retrain Ph.D.'s for alternative employment, primarily in the private sector. Although the evidence outlined in *Academia in Transition* is fragmentary, the author also regards the retraining of faculty for other disciplines or specialties as desirable. He suggests that "such retraining programs do give institutions the flexibility to reallocate resources to more productive use" (p. 25).

Four major university systems in the United States (State University of Florida, the Pennsylvania State Colleges System, State University of New York and the University of Wisconsin) have had retraining programs for faculty in departments with declining enrolments.

For Canada, this book provides several working hypotheses, and demonstrates the need to document the case. Such an undertaking would not be as formidable as it seems, since the number of universities involved would be small compared with the United States.

But in some ways, Canada's situation is more urgent, because demographic trends combined with student preferences are producing an imbalance in the supply and composition of university teachers. Demand for their services is limited in some disciplines, while others still have growth potential. The anticipated 21% decline of the source population (18-24-year-olds) and the shifting composition of the student body make early retirement or mid-career change desirable and necessary options for some arts and science faculty for the 1980s.

Recent American legislation cited by Patton is of particular interest. In 1978 the Age Discrimination in Employment Act of 1967 was amended to extend the mandatory retirement age from 65 to 70 in private industry and nonfederal public employment, and to remove it completely for federal employees, but tenured faculty are exempted until 1982. Although he touches on the implications of the revision to the Act, a fuller treatment would have been desirable. If Canadian universities, which have standardized formal retirement at 65, follow the U.S. example, it might prolong the careers of some faculty in the future, and consequently, create fewer openings. On the whole, Canadian university faculty tend to be younger than their American counterparts: whereas 26.5% at U.S. universities are older than 50, the comparable proportion in Canada is 18.8%. Only an estimated annual 0.7% of the 32,500 full-time university teachers will reach mandatory retirement in the next five years. Expressed in absolute numbers, there will be, on the average, only 250 positions created through retirement each year, and about the same number on account of mortality. Meanwhile enrolment might continue to drop. A recent report by the Ontario Council on University Affairs speculated that if enrolment declines by 25%, this could mean that 2,500 from the 12,000 full-time university teachers might become redundant within the next five years in Ontario alone. Thus, should present trends continue, attrition of senior faculty through retirement will not be sufficient to successfully adjust to the projected student population of the 1980s. The early retirement of Canadian faculty

is a possibility that should be explored, but retraining may be a more useful alternative. The shift of student preferences has been more abrupt in Canada than in the United States. Students are increasingly oriented toward professional and career programs. Through secondment or other means, arts and science faculty might be reoriented to teach in professional programs where there is a future demand. In fact, many who are now teaching career-oriented disciplines had their graduate education in the humanities, social sciences and sciences. This transformation could be accomplished, as suggested in *Academia in Transition*, through liberal leave arrangements, possibly supplemented by special workshops, either during the summer or during the academic year, and might be facilitated by government support.

Since many university teachers can take sabbatical leave after six years, more than 4,500 full-time faculty are eligible each year. Professor Patton has suggested that the retraining of faculty will require a system-wide approach rather than action by individual universities.

In developing mid-career change programs, another strategy could be tried: to encourage faculty to spend some of their working lives in jobs outside of academia, in the government and private sector, under special leave arrangements. Such a program might enhance the outward mobility of faculty, which under present labour market conditions, has been immensely reduced. This not only has serious consequences for the individual, but also for the vitality of the university community.

Suggestions of this sort, however, do not resolve the related issue of employment opportunities for recent Ph.D. graduates and those who will graduate in the next few years. Traditionally they have sought appointments at universities. But most observers agree that the outlook for new faculty employment is discouraging; only the dimensions of the problem are at issue. Surprisingly, though, the majority of Ph.D. graduates still perceive university teaching as their goal.

Academia in Transition originated in 1977 from the National Science Foundation, and was published in a different format by the National Technical Information Service, U.S. Department of Commerce, and that might be reflected in the technicality of some of the chapters. Apt Books published its version in 1979.

It is basically confined to the American experiences without any mention of international studies. Although each chapter has separate notes, a bibliography at the end would have been helpful. But these are minor quibbles.

Academia in Transition is a timely and informative discussion that provides the perspective necessary to address some of the critical issues Canadian universities are facing.

1 Shulman, Carol Herrnsdorf. "Old Expectations, New Realities: The Academic Profession Revisited." American Association for Higher Education: Washington, D.C. 1979, p. 45.

2 Ibid. p. 46.

3 Patton, Carl V. "Institutional Responses to the Mandatory Retirement Age" prepared for the Forty-third Annual Meeting of the Midwest Economics Association, Chicago, Illinois, April 6, 1979. See also David D. Palmer's "Faculty Responses to Higher Mandatory Retirement Age: Which Faculty Members Will Stay?" prepared for the same meeting.

About our reviewers

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Education—a tool of political development, or for intellectual growth?

by Alf Chaiton

Eric W. Ricker (ed.), *Education and Development in Atlantic Canada*. Halifax: Department of Education, Dalhousie University, 1978.

Andrew F. Skinner, *Teachers' Heritage: An Introduction to the Study of Education*. Toronto: Guidance Centre, Faculty of Education, University of Toronto, in association with Van Nostrand Reinhold Ltd., 1979.

It is interesting to compare these two, very different books. *Teachers' Heritage* would be classified as the History of Educational Thought or the Philosophy of Education; *Education and Development in Atlantic Canada* as Sociology of Education. Skinner's volume is an integrated work by a single author; Ricker's compiles the proceedings of a week-end conference. Ricker's collection centres on Atlantic Canada, especially since Confederation, while Skinner covers the Western world, from Ancient Greek times to the present. Skinner's orientation is 'old-fashioned'; the other is 'modern'.

Because of these differences, and because both, at heart, attempt to present a method for looking at Education and the Study of Education, the results of such a comparison are most instructive.

Education and Development in Atlantic Canada is the proceedings of a conference held at Dalhousie University under the joint auspices of the Dalhousie Department of Education and the Atlantic Education Association, April 28-30, 1976. It deals with the relationship between education and economic development, asking two basic questions: what impact on economic development has education made?, and what impact on education has economic underdevelopment had? Participants included John Saul, Denis Smith, Ronald Manzer, and David Macdonald (the past Secretary of State and Minister of Communications in the federal government).

The thrust of the volume is to argue that education 'supports the status quo'. Therefore, in an economically underdeveloped region such as Atlantic Canada, the educational system maintains that underdevelopment. The analysis is as appropriate, it is noted by several authors, in Atlantic Canada as in, for example, Tanzania.

Andrew Skinner, on the other hand, does not once mention the word 'economics', and 'development' is used in connection with intellectual and personal, rather than political or economic, development. The closest he comes is to state that education for citizenship and social service, and technical training for productive work are significant aims of the educational process. In other words, education is a neutral instrument that can have a conservative or revolutionary influence, depending on the content of the teaching. The notion of education as an economic investment by society does not come into play, except insofar as that society produces better individuals and citizens.

The difference turns on this crucial point: is education primarily a tool of political and economic development, or is it basically for intellectual and personal growth? This is not to say that the two are mutually exclusive, but rather that the orientation used is central to the consideration of all other questions. Thus, for example, personal growth in Atlantic Canada is seen as being stunted, or underdeveloped, by the educational system either in order to maintain, or less radically, as a result of, the present economic system. Personal development goes hand-in-hand with economic development.

The methodologies reflect the differences between the two volumes. Skinner applies Emerson's dictum that "all history resolves itself very easily into the biography of a few stout and earnest persons". Therefore, he explores the views of several 'famous educationists' (Plato, Aristotle, Rousseau, and Dewey), and several 'outstanding teachers' (Quintilian, Vittorino da Feltré, Pestalozzi, Herbart, and Froebel). The former group, he notes, would be of special interest to the teacher as student, and the latter to the teacher as teacher, and both come within the purview of the student of education. His perspective is represented by the following:

"We cannot look, however imperfectly," wrote Thomas Carlyle, "upon a great man without gaining something by him." After our study of Pestalozzi, Herbart, and Froebel in this chapter, we may well agree not merely that we recognize them as great men and great teachers but that inevitably there is much we can learn from them. It is true that much of their educational thought and many of their teaching practices are outdated. Nevertheless, there is a great deal in them that continues to be of interest and value, and the impetus they gave to educational development in the nineteenth century still has force. Indeed, the advances made in education in the current century owe a great deal to their dedicated work and in many ways their influence remains. Their ideas and practices have been caught up in the broad sweep of progress in education. (p. 229)

The major theoretical construct in the Ricker volume is André Gunder Frank's model of underdevelopment, by which the world is seen as split between dominant metropolis and dependent hinterland. The economic dominance (or dependence) is reflected in the social system, including education. The role played, quite consciously, by the authors, is that of social critic, dedicated to social reform. The book's perspective is well illustrated by Ricker in the Preface:

Although schools are not usually considered an integral part of these larger questions, in recent years sociologists and social historians have laid bare their real functions as they relate to the political economies of the societies in which they are situated. The new school systems of Atlantic Canada... are mainly imitative of their counterparts in the industrialized areas of this country and the United States. As a consequence, they serve the same basic functions which have been discussed by numerous writers: containment,

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nouvelles méthodes" font figure miraculeuse. Ces méthodes sont tout aussi nouvelles que les "nouveaux" déferifs, anti-sudorifiques, etc. dont la promotion bruyante se fait sans interruption à la télévision.

Un des mots-clés dominants est "la découverte", que l'on doit "encourager" à tout prix, que l'on doit pousser en devenant des enseignants "ressources", et qui devrait nous permettre de produire un type d'humanité bien plus capable que jamais. Hélas! En se précipitant vers le soleil de la découverte, on oublie qu'il n'y a pas de découverte sans un capital apperceptif, qui, lui, a un caractère cumulatif en proportion avec l'âge de l'élève. On ne saurait donc pas souligner assez l'importance de la connaissance. Un cas typique: dans le temps on apprenait les tables de multiplication par cœur et cela ne menait pas à une compréhension de l'utilité de cet exercice. Tout tombait en place plus tard. Aujourd'hui, avec les "nouvelles" mathématiques on arrive à une compréhension précoce, mais à des manifestations semidoctes plus tard, car même des étudiants en première année d'université semblent être incapables d'effectuer des opérations mathématiques simples, tout en "compréhendant les principes" de théories sophistiquées.

C'est cette insistance dans le domaine du cliché qui a permis à certains croyants aux vertus des "méthodes actives" d'affirmer pouvoir "enseigner à penser". Et rien ne saurait prouver ce point mieux que ce grand maître du raisonnement circulaire, B.F. Skinner, un nom qui jouit encore d'une forte influence en psychopédagogie, et je cite: "Les grands penseurs ont rarement pensé au processus de la pensée" et plus loin "ceci est particulièrement regrettable parce que le processus de la pensée dans ce sens n'est jamais observé que par le penseur" (cf. The Technology of Teaching, p. 117). Et finalement, EUREKA: "Penser veut souvent dire tout simplement se comporter" (cf. op. cit. p. 119).

Si à cet effort autologique on ajoute tout ce qui a trait à une pensée pince-sans-rire qui assure ces pauvres parents qu'il faudra que leurs enfants "apprennent à apprendre" pour que tous leurs espoirs soient réalisables, on aura compris que tous ces procédés, "d'organisation", de "timing" (angl.) ne sont que de'autres éléments de circularité, dont le rôle est d'assurer la survivance d'une médiocrité qui commence à devenir la règle plutôt que l'exception. Voilà pourquoi l'idée de l'effort livresque rencontre tant de résistance dans les cercles étudiants, corrompus par le formalisme organisationnel et la foi audio-visuelle, un autre fétiche dans le vent.

Les responsabilités

Il n'y pas longtemps, l'enseignant établissait des groupes de sujets obligatoires. Quant au choix de l'étudiant, il pouvait s'exercer à l'intérieur d'un schéma qui permettait à l'enseignant de prendre la responsabilité pour l'efficacité du "produit humain", à la fin des études. A ce moment-là il y avait la certitude d'être employé par la communauté dans des conditions raisonnables. A présent, à part le fait qu'à travers le cours secondaire il n'y a pas la moindre barrière qui puisse nous renseigner sur la valeur objective de l'étudiant, il y a le fait que, grâce à l'inflation des notes au secondaire et grâce au caractère semidocte de l'étudiant sous-gradué, la liberté de choix, pratiquée sans réserve aucune à l'entrée dans l'université, combinée avec la tendance à la paresse et à l'opportunisme, notre gradué universitaire sera, en bien des cas, le possesseur d'un grade en études "de cafétéria", c'est-à-dire en études osives et qui sont rejetées par la

communauté. Ces qualifications inutiles poussent les jeunes, assez souvent, vers des récriminations amères. Cependant, la responsabilité totale de cet échec leur appartient. Car, comme on verra plus loin, cet état de choses est aggravé par un autre phénomène généralisé, très moderne, la mode de l'évaluation, instrument sine qua non de la responsabilité comptable.

L'évaluation, surtout dans les universités, s'est prouvée en état de faillite. Le "Educational Researcher", organe de la AERA (American Educational Research Association) affirmait dans un survol récent, basé sur les travaux des derniers dix ans, que rien n'était sorti de ce domaine d'intérêt, qui soit applicable à quoi que ce soit et que toute conclusion dans la matière n'était que du domaine de l'intérêt personnel et de l'intention du chercheur. Tout cela du côté de l'objectivité. Car dans la réalité universitaire on assume la constance de ce genre d'"instrument", (assez souvent fondé sur des questionnaires douteux auxquels répondent des étudiants relativement ignorants en certaines disciplines), qui servira certains impérialismes administratifs. Ce qui rend cette situation encore plus préoccupante est que l'évaluation des cadres administratifs est impensable, surtout quand la majorité des universités est suradministrée.

L'évaluation est l'instrument de la responsabilité comptable, un concept vaguement accepté en industrie, et que l'on a voulu lancer en éducation par le truchement d'une analogie spéieuse. Qui oserait, en effet, comparer le domaine industriel au domaine de l'esprit? Et, encore une fois, avant de comparer, a-t-on établi, à la satisfaction de tous, qu'il y a comparabilité? Disons que la responsabilité comptable en éducation est l'enfant mort-né des rêves dorés de l'administration scolaire.

Il serait bon de nous arrêter ici, car la liste des clichés, source de malentendu et collection de fausses étiquettes qui troublent les esprits et des enseignants et des étudiants et de leurs parents, semble infinie.

Comment pourrait-on arriver à une situation où le dialogue devient possible, soit parce que l'influence des clichés a été supprimée, soit parce que le verbalisme a été remplacé par un vocabulaire d'acceptation bilatérale? Il nous semble qu'il y aurait bien des possibilités à entrevoir dans les limites du bon sens. Un dialogue de sourds: c'est de quoi cela a l'air. Néanmoins, avec l'optimisme opiniâtre qui doit caractériser un enseignant qui a la foi de sa vocation, nous serions enclins à présumer que la communauté et l'enseignement s'entendent mais ne s'écoutent pas. Il faudrait, aux enseignants d'orienter la communauté vers une ouverture d'esprit qui, une fois en possession d'un lexique pédagogique compréhensible et plein de bon sens, permette à ce dialogue vital de reprendre.

L'auteur est professeur titulaire, Faculté d'Education, Université d'Ottawa.

Education — a tool ...p. 27

preliminary career and job sorting in accordance with the constraints imposed by the social system, and socialization to the routines of modern industrial and bureaucratic life.

But what is not commonly appreciated or understood is the direct link between the new schools and the transformation of the economy. At one time it was necessary to infer the relationship from the disparate and uncoordinated statements of educators and economic planners. It is no longer necessary to do this. Education has been removed from its protective cocoon, for the pace of change nowadays is such that the planners who develop the new school systems for the bureaucrats of North America openly and proudly link their designs to magnificent industrial strategies. But even though their statements of intent are frequently publicized, they are strangely ignored by a profession steeped in a long tradition of suffocating

UNIVERSITY OF WESTERN ONTARIO

FACULTY OF NURSING

Applications are invited for teaching positions in undergraduate and graduate programs. Rank Open.

Master's or doctorate degree required. Preference will be given to candidates with teaching experience for registration in Ontario.

Salary commensurate with preparation and in accordance with the University of Western Ontario policies. Appointments are subject to availability of funds.

Send complete resume to:

Dr. Beverlee Cox, Dean,
Faculty of Nursing,
Health Sciences Addition,
The University of Western Ontario,
London, Ontario, N6A 5C1

THE UNIVERSITY OF WESTERN ONTARIO

Department of Psychology

A number of replacement positions will be open probably at the Assistant Professor (Ph.D. complete) level, but Associate Professor with tenure possible. Subject to budgetary approval, appointments may be made in applied psychology (particularly clinical, community, child clinical), developmental, introductory psychology, and possibly measurement. Candidates with demonstrated scholarly capability and scientific programs are encouraged to apply. Independent research productivity and interest in teaching are required. Duties include undergraduate and graduate instruction, significant research performance, and some committee responsibilities. Although we are interested in identifying promising Canadian candidates, all applicants will be considered. Appointments to commence July 1, 1980. Applicants should send a curriculum vitae, copies of publications, and arrange for at least three references, to:

W. J. McClelland,
Professor and Chairman,
Department of Psychology,
University of Western Ontario,
London, Ontario,
N6A 5C2

mentality: a profession which continues to see all change in terms of forward leaps in pedagogical theory. (pp. xx-xxi)

Thus, in these two, very different works, we see encapsulated much of the current debate about the role of education in society and how education should be studied. Both are excellent exemplars, and worth going over with considerable care.

The Webber case ...p. 18

such new procedures would, as you state, be "better procedures" since I believe that those which exist, and as they have been applied, offer full protection to our faculty members. Nevertheless, we are quite willing to negotiate new procedures as an indica-

tion of good faith and of our desire to reaffirm our continued adherence to the principles of academic freedom, of equity, and of natural justice. We regret that you find this proposal unacceptable.

In conclusion, I can only reiterate our firm belief that, Professor Webber's case having been heard by an impartial and properly constituted arbitral body, she was not in any way deprived of any of the rights that considerations of equity or of natural justice demand. We would not, of course be so arrogant as to claim total indifference to the fact of censure and, except for the notion of re-arbitration, are prepared to keep an open mind in respect of any other solution you might propose.

Very sincerely yours,
L. Harris
Vice-President (Academic)

VACANCIES, POSTES VACANTS

CAUT BULLETIN

Special advertising edition — June '80

Due to requests from several of our member universities, the CAUT will be publishing, on a trial basis, a special edition of the *CAUT Bulletin* devoted primarily to advertising. This summer edition of the *Bulletin* will be in addition to the six regular issues which appear at the first of September, October, December, February, April and May.

The summer edition is scheduled for publication in mid-June.

The deadline for receipt of advertisements for this issue is May 20.

We hope that many of our member universities will find that this special advertising edition of the *Bulletin* provides a useful service and that we will be able to provide it on a continuing basis in future.



DEPARTMENT OF ANAESTHESIA

HEAD

**DALHOUSIE UNIVERSITY,
HALIFAX, N.S.**

Dalhousie University invites applications for the above position. This is a full-time university post. Responsibilities will include the further development of an undergraduate and graduate teaching program, and the fostering of the research activities of the department. The Head will also be responsible for the development and maintenance of clinical programs in the teaching hospitals affiliated with Dalhousie University in Halifax and in the Maritime provinces.

Applications to:
Dr. R.O. Jones
Chairman
Anaesthesia Search Committee
9A, Centennial Building
Victoria General Hospital
Halifax, Nova Scotia
B3H 2Y9

announces the establishment of the Senator Patrick Burns Chair of Child Welfare. The person appointed to this senior position will be a scholar with an established reputation in child welfare. The objective of the Chair is to advance knowledge and practice in this field locally, nationally and internationally, through research, writing, consultation and supervision of some graduate students. The term appointment is five years, which may be renewable. The salary will be commensurate with qualifications and experience. Provisions will also be made for secretarial and research support. The date of appointment is July 1st, 1980, or as soon thereafter as possible. Enquiries or applications should be directed to: Dr. Leonard Richards, Dean, Faculty of Social Welfare, The University of Calgary, 2500 University Drive, N.W., Calgary, Alberta, Canada, T2N 1N4. Applications should include a resume and the names of three referees.

UNIVERSITY OF MANITOBA, Faculty of Architecture, Department of City Planning. Nominations and applications are invited for the position of Head of the Department of City Planning. The Department of City Planning offers a Master Program (M.C.P.) and works in collaboration with other departments of the Faculty, (Architecture, Landscape Architecture, and Environmental Studies) with other departments and research institutes of the University of Manitoba, and offers a joint Master of Public Affairs program with the University of Winnipeg. The Department, recognized by both C.I.P. and A.P.A., presently has over forty students enrolled in its graduate program. Areas of substantive interest of the Department are urban and regional policy, design, planning theory, and critical urban analysis. Candidates must possess a graduate degree in Planning, and demonstrated teaching, research and planning experience. Proven leadership and administrative abilities are highly desirable. Canadian citizens, permanent residents and others eligible for employment in Canada at the time of application are especially encouraged to apply. Applications, including curriculum vitae, names and addresses of three referees should be directed to: John W. Graham, Associate Dean, Faculty of Architecture, University of Manitoba, Winnipeg, Canada, R3T 2N2. Position to be filled by July 1st, 1981 at the latest. Applications should be received prior to May 31st, 1980.

UNIVERSITY OF SASKATCHEWAN, College of Commerce, Head of the Department of Finance and Management Science. Academic Rank: Associate or Full Professor, depending upon academic qualifications and experience of the candidate. Effective Date of Appointment: The successful candidate should be available no later than January 1, 1981, but preferably by July 1, 1980. Qualifications: A doctorate in Finance and/or Management Science or related discipline is required. The successful candidate will possess a record of significant academic and administrative accomplishments. Responsibilities: The Department Head has general academic and administrative responsibility for the direction and operation of the Department. The Head is expected to provide leadership in formulating departmental policies and in the planning and development of academic programs. Although responsible for communication, organization and administration within the department, the Department Head is also expected to remain a scholar actively involved in teaching and research. Environment: The Department has 8 permanent faculty members and 4 to 6 seasonal lecturers. The College of Commerce has 42 full-time faculty members and in excess of 1,300 (undergraduate and graduate) students. The University of Saskatchewan has a student population of over 10,000. The University is located in Saskatoon, a city of 160,000 with excellent schools and other public facilities. Further information: Interested candidates should send their resumes to: Dean P. Michael Maher, Ph.D., College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0. Phone: (306) 343-3761.

UNIVERSITY OF CANADIAN UNIVERSITIES FOR NORTHERN STUDIES, Ottawa,

Ontario, Executive Director. Beginning September 1, 1980. Initial appointment for two years; secondment possible. ACUNS is an Association of 26 Canadian Universities active in northern studies and research. Qualifications: The position requires working knowledge of Canadian universities; and/or related government activities; administrative skills; research or comparable northern experience in university and/or government. Remuneration at university scale. Submit resume or inquiries by May 15, 1980 to: J.G. Nelson, Chairman, Search Committee, Faculty of Environmental Studies, University of Waterloo, 200 University Avenue, West, Waterloo, Ontario, N2L 3G1.

CAREY HALL. Carey Hall located on the campus of the University of British Columbia, invites applications for the position of Principal for the program beginning September 1, 1980 leading to the M.Div. degree. Candidates must be ordained, hold a Ph.D. degree or equivalent in a discipline of practical theology or Baptist Studies, and have demonstrated skills in administration. Further details may be obtained by writing to the Search Committee, Carey Hall, 5920 Iona Drive, Vancouver, B.C. V6T 1J6.

UNIVERSITY OF GUELPH, Department of Biomedical Sciences. Chairperson, Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph. Applications and nominations are invited for the above position which will become vacant on July 1, 1980. The Department embraces the disciplines of Physiology, Anatomy, Genetics, Clinical Chemistry, Pharmacology, and Toxicology. It is responsible for preclinical instruction within the D.V.M. Program and for providing the required disciplinary courses to science students. It has a complement of 27 faculty members. Applicants must hold an advanced degree at the doctoral level in one of the above disciplines and have a proven record of scholarship, teaching, and research. Administrative experience would be desirable. The successful applicant will hold an academic appointment within the Department at a rank commensurate with his/her experience and qualifications. Applications and nominations will be accepted until March 31, 1980 or until the position is filled, and should be submitted to: Dean, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada, N1G 2W1. Position subject to final budgetary approval.

UNIVERSITY OF SASKATCHEWAN, College of Agriculture, Department of Horticulture Science. Applications are being invited for the position of Head. The incumbent wishes to step down effective June 30, 1980. This is a tenurable position in the department, but the Chairmanship is a five year term, renewable. Successful candidate should have a Ph.D. in Horticulture or related science and should have demonstrated administrative ability in teaching, research and/or extension. Responsibilities include development and participation in the departmental programs in teaching, research, public service and extension, budgetary administration, and encouragement of interdisciplinary programs. Remuneration includes professorial salary plus administrative stipend for Head duties. Applications with curriculum vitae plus names of at least three referees that have been requested to forward letters should be sent to: Dean J.A. Brown, College of Agriculture, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

SIMON FRASER UNIVERSITY, Faculty of Interdisciplinary Studies, Department of Computing Science. Simon Fraser University is seeking applications for the position of Chairman of the Department of Computing Science. The successful applicant will be expected to have demonstrated academic achievement in the general area of computing science and to be eligible for a serious academic appointment. Administrative experience would be an advantage. The salary and rank will be dependent on qualifications and the appointment will take effect September 1, 1980. Applications and nominations should be sent to: Dr. T.W. Calvert, Dean, Faculty of Interdisciplinary Studies, Simon Fraser University, Burnaby,

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

Faculty of Medicine Health Sciences Centre

CARDIOLOGIST

The Faculty of Medicine at Memorial University of Newfoundland and the General Hospital invite applications for a senior geographic full-time appointment in Cardiology at the Health Sciences Centre. The successful candidate will have major responsibilities in the teaching programs at the undergraduate and postgraduate levels. Demonstrated abilities in clinical, teaching, and research activities will be important. Academic rank and salary will be negotiated in relation to experience and other factors. Apply with curriculum vitae to Dr. G.B. Adams, Acting Chairman of Medicine, Memorial University of Newfoundland, Health Sciences Centre, St. John's, Newfoundland, A1B 3V6.

ADMINISTRATIVE POSITIONS

UNIVERSITY OF BRITISH COLUMBIA, Director for Athletics. The University of British Columbia invites applications and will receive nominations for an Athletic Director, to commence duties preferably on July 1, 1980. The Director will have a) academic qualifications and experience appropriate for a senior tenured appointment to the Faculty of the University; b) athletic qualifications (for example, as a former athlete and/or as a coach) and experience appropriate for a leadership and administrative role in University athletics; c) the management ability and qualifications necessary to assume responsibility for a large budget and staff, and to generate external funding; d) a thorough understanding of and sensitivity to the role of athletics

within the structure of the University and at all levels of Canadian society. It would be advantageous if the Director's reputation in athletic circles ensured ready access to relevant individuals in the public and private sector as well as to the media. Applications and nominations should include a curriculum vitae and the names of at least three people to whom confidential reference can be made. Applications and nominations should be received by April 30, 1980 and should be addressed to: Dr. R.H.T. Smith, Chairman, President's Selection Committee, Director for Athletics, President's Office, The University of British Columbia, No. 107-6328 Memorial Road, Vancouver, B.C., V6T 2B3. The University of British Columbia offers equal opportunity for employment to qualified female and male candidates.

UNIVERSITY OF CALGARY, Faculty of Social Welfare, Chair of Child Welfare. An-

FACULTY POSITIONS

Applications are invited for the following undergraduate and graduate teaching positions:

School of Business Administration

Individuals interested in teaching undergraduate and graduate students in one or more of the areas of Accounting, Finance, Management Science, Marketing, and Organizational Behaviour.

School of Engineering

Chemicals Engineering: Process control.
Civil Engineering: Structural design, preferably steel design.
Electrical Engineering: Communications engineering and electrical power systems or industrial electronics.
Mechanical Engineering: Expertise in one of vibrations, mechanics of machines, solid mechanics, machine design, and production systems.

School of Forestry

Individuals interested in teaching undergraduate and graduate students in two of the areas of Silvics, Forest Ecology, Silviculture and Forest Tree Improvement.

School of Physical Education and Outdoor Recreation

Individuals to teach in the Outdoor Recreation program.

School of Nursing

Individuals to teach: Medical/Surgical; Community Health.

Advanced degree(s), professional registration (if applicable), and practical experience are desirable. Research and consulting are encouraged. Rank and salary will be determined by qualifications and experience.

Please send curriculum vitae and the names of three references to:

Mr. D.E. Ayre,
Secretary of the University,
Lakehead University,
Oliver Road,
THUNDER BAY, Ontario P7B 5E1

Lakehead University

THE UNIVERSITY OF ALBERTA DEAN OF ARTS

Applications are invited from both men and women for the position of Dean of Arts which became vacant when the former dean was appointed Vice-President (Academic). The Faculty offers undergraduate and graduate programs in the Humanities, the Social Sciences and the Fine Arts.

Written applications, with a curriculum vitae and the names of three referees, should be sent within the next two weeks to:

Dr. M. Horowitz, President & Chairman
Selection Committee, Dean of Arts
The University of Alberta
3-1 University Hall
Edmonton, Alberta
T6G 2J9.

B.C. VSA 156, from whom further information can be obtained.

UNIVERSITY OF TORONTO. School of Architecture. The University of Toronto is seeking a Chairman for the Department of Architecture to take office July 1, 1980, or as soon as possible thereafter. The Department offers a five-year program leading to the B.Arch., and post-professional degree programs leading to the M.Arch. A revision of the structure of the School's programs is under study. Qualifications required are capacities for leadership in architectural education, and to relate effectively to the practicing profession. The existing School of Architecture will become a department in a new faculty with the Department of Landscape Architecture on July 1, 1980. Nominations and applications should be addressed, by April 30, 1980, to: Professor B.L. van Ginkel, (Dean-designate), Director, School of Architecture, University of Toronto, 230 College Street, Toronto, Ontario, Canada, M5S 1A1.

UNIVERSITY OF TORONTO. Faculty of Medicine. Pathology, Hospital Department: Pathology. 2) University Title: Professor and Chairman. Hospital Title: Chief. 3) Qualifications required: M.D., Royal College Fellowship. 4) Nature of Duties: Leadership of a University Department, with Divisions in several teaching hospitals, research activities in the Medical Sciences Building, association with several community hospitals and with the School of Graduate Studies. 5) Salary: Commensurate with experience. 6) Person to whom enquiries should be sent: Dr. R.B. Holmes, Dean, Faculty of Medicine, University of Toronto, Room 2109, Medical Sciences Building, Toronto, Ontario, M5S 1A8. 7) Effective date of appointment: July 1, 1980. 8) Closing date for receipt of applications: May 1, 1980.

ACCOUNTING

UNIVERSITY OF WATERLOO. Department of Economics. Applications are invited for several faculty positions from those with teaching and research interests in accounting, auditing, taxation and financial. Doctorate in hand or near completion is preferred but candidates who plan to pursue doctoral studies in the future will be considered. Teaching and research excellence are required. Ranks open and salaries competitive depending upon education and experience. Appointments will be from September 1, 1980 but other dates can be arranged due to the flexibility provided by our year round co-op programmes. Application or inquiries, including curriculum vitae, should be sent to Professor Robert Long, Director of Accounting Programmes, Department of Economics, University of Waterloo, Waterloo, Ontario, N2L 3G1. First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by these positions. Availability of these positions is subject to budgetary approval.

AGRICULTURAL/ANIMAL SCIENCES

UNIVERSITY OF SASKATCHEWAN. Division of Extension and Community Relations. Agricultural Extension Programmer. This person will be responsible for handling the arrangements for courses offered from the University that are directed to the Agriculture industry. Each year over fifty of these courses are conducted throughout the province and on campus. This person will also work closely with faculty in preparing agriculture information for distribution through print materials and radio and television programs. Qualifications: Graduate in Agriculture required, experience in conducting agricultural extension activities preferred. Salary range: \$18,000-\$25,000. Subject to budgetary confirmation. Appointment date: April 1, 1980 or as soon thereafter as possible. Send inquiries and resumes to: Associate Director, Extension Programs, Division of Extension and Community Relations, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

UNIVERSITY OF BRITISH COLUMBIA. Faculty of Agricultural Sciences. Department of Poultry Science. Population/Quantitative Genetics. The Department of Poultry Science in the Faculty of Agricultural Sciences at The University of British Columbia

at Vancouver invites applications from qualified individuals for a position in Population/Quantitative Genetics. Qualifications: Ph.D. degree in poultry genetics. Competence in population/quantitative genetics. Experience in animal behaviour would be advantageous. The candidate must have demonstrated interest, aptitude, and experience in classroom teaching and demonstrated capability in research. Lecture and laboratory instruction in the areas of poultry genetics and ethology in accordance with departmental teaching responsibilities is a fundamental responsibility associated with the position. Willingness to interact with the poultry industry is essential. Applications will be accepted until 30 April, 1980 or when a suitable candidate is identified. Salary commensurate with qualifications and experience. Send letter of application, curriculum vitae (including list of publications), transcripts, a statement of research interests, and names of three references to: Dr. D.B. Bragg, Chairman, Poultry Science Department, Suite 248, 2357 Main Mall, The University of British Columbia, Vancouver, B.C., V6T 2A2. The University of British Columbia is an Equal Opportunity Employer.

UNIVERSITY OF GUELPH. Ontario Agricultural College. Department of Animal and Poultry Science. Animal Breeder. Ph.D. in animal breeding with background in statistical genetics. Experienced in data analysis methodology and in working with animal breeding industry. Responsible for developing a research programme and teaching undergraduate and graduate students. Appointment at Assistant Professor on probationary basis or Associate Professor level. Position subject to final salary review. Applications should be sent to May 1, 1980 or until position filled. Direct replies to W.D. Morrison, Professor and Chairman, Department of Animal and Poultry Science, Ontario Agricultural College, University of Guelph, Guelph, Ontario, Canada, N1G 2W1.

ART/DESIGN/ART HISTORY

THE UNIVERSITY OF ALBERTA. Department of Art and Design. The Department of Art and Design, University of Alberta is seeking applications for the following full-time teaching positions: Industrial Design: The successful candidate should preferably have a Masters degree or equivalent, practical Design experience in areas such as consumer products, capital goods, furniture Design, and previous teaching experience. Rank - Assistant Professor. Salary range \$19,696 to \$22,216 (subject to 1980/81 salary revisions). Visual Communication Design: (Subject to budget consideration). The successful candidate should preferably have a Masters degree or equivalent, practical Design experience in any, or combination of the following specializations: Illustration, Animation, multi-media presentation, publication Design, and previous teaching experience. Rank - Assistant Professor. Salary range \$19,696 to \$22,216 (subject to 1980/81 salary revisions). Applications, including curriculum vitae slides of work, names of three referees, and relevant transcripts should be sent as soon as possible, and no later than April 30, 1980 to: Doug Haynes, Chairman, Department of Art and Design, University of Alberta, Edmonton, Alberta. T6G 2G9. The University of Alberta is an equal opportunity employer.

CONCORDIA UNIVERSITY. Faculty of Fine Arts. The Faculty of Fine Arts of Concordia University has a full-time position available for a Specialist in Canadian Art and/or Canadian Architectural History. The appointment will commence June 1st, 1980. The successful candidate will be required to teach three courses and should be competent in more than one area of Canadian Art and/or Canadian Architectural History. Courses in the field of Canadian Art are offered at both the undergraduate and graduate level. Preference will be given to applicants who have, or are near completion of, a Ph.D., or who have equivalent experience and credentials. Teaching experience at the university level is essential and bilingualism (English/French) will be considered an asset. Rank and salary will be

commensurate with the applicant's qualifications and experience. The closing date for applications is April 30th, or until the position has been filled. All letters of applications must be accompanied by a complete curriculum vitae and the names of three persons who would be prepared to serve as references. Please address all applications to: Dr. Robert J. Parker, Director, Division of Visual Arts, Faculty of Fine Arts, Concordia University, Room VA-238, 1395 Dorchester Blvd. West, Montreal, P.Q. H3G 2M5.

QUEEN'S UNIVERSITY. Department of Art. Department of Art, Queen's University expects to be able to offer a one year position of printmaker, rank Assistant Professor, at salary of \$17,800, to teach offset and stone lithography and introductory photography throughout the four year Degree Program (Bachelor of Fine Art). A competence in teaching etching would be an asset. Appointment to commence September 1, 1980. Previous degree-level teaching experience preferred. Candidates of both sexes are equally encouraged to apply. Slides and curriculum vitae, or the names of three references to: Dr. Robert J. Parker, Director, Division of Visual Arts, Faculty of Fine Arts, Concordia University, Kingston, Ontario. K7L 3N6

UNIVERSITY OF MANITOBA. School of Art. Printmaker required to teach relief and/or serigraphy. Part-time position probably to be one-third to two-thirds of an academic load. M.F.A. or equivalent. Submit curriculum vitae, examples of recent work (slides or prints) and the names of three references to: R.C. Sakowski, Acting Director, School of Art, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. Deadline: June 1, 1980.

UNIVERSITY OF MANITOBA. School of Art. Photographer required to teach beginning and advanced courses. The ability to teach the History of Photography would be an asset. M.F.A. or equivalent. Submit curriculum vitae, examples of recent work (slides or prints) and the names of three references to: R.C. Sakowski, Acting Director, School of Art, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. Deadline: June 1, 1980.

BIOCHEMISTRY

UNIVERSITY OF ALBERTA. Department of Biochemistry. Postdoctoral Position available April 1980 to study the enzymes of bacterial anaerobic electron transport. Strong background in microbial, genetics and biochemistry essential. Send resume and names of three references to: Dr. Joel Weiner, Dept. of Biochemistry, University of Alberta, Edmonton, Alberta. T6G 2H7.

BIOLOGY

DALHOUSIE UNIVERSITY. Department of Biology. Dalhousie University has a vacancy for a two-year appointment for an Assistant Professor in the area of Cell Biology. Teaching duties in the first year would be in Introductory Cell Biology and in Introductory Cell-Molecular Biology, and the possible supervision of Honours students. An individual with a research interest in the cellular physiology of marine plants or animals would be preferred. Starting date: on or after July 1, 1980. Salary: according to level negotiated in Collective Agreement. 1979-80 Asst. Prof. range is \$17,750-\$26,450. Send curriculum vitae and three references to the Chairman, Department of Biology, Dalhousie University, Halifax, N.S. B3H 4J1, as soon as possible.

UNIVERSITY OF WINNIPEG. Department of Biology. Botany. Applications are invited for a position as Assistant Professor. Duties will include teaching two half courses in the Anatomy and Physiology of Seed Plants and one first year Biology course. Candidates should have a Ph.D. and some teaching experience. The position is renewable on a sessional basis for three years. Starting date: September 1, 1980 or earlier by arrangement. Present salary floor \$18,000. Send curriculum vitae and the names of three references to: Dr. R.A. Woods, Chairman, Department of Biology, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba, R3B 2E9.

THE UNIVERSITY OF TORONTO. Department of Botany. Applications are invited for a faculty position in the Department of Botany. Applicants should have a major interest in the Systematics of Higher Plants.

The appointment will be made in the tenure stream. The successful candidate will normally have a Ph.D. and a significant research record, together with teaching experience in taxonomy. The position will include curatorial responsibilities for the herbarium. The appointment will be at the assistant or associate professor level, at a starting salary of not less than \$17,400, dependent upon experience. The appointment is subject to final budgetary confirmation. Further particulars can be obtained from Professor T.C. Hutchinson, Chairman, Department of Botany, University of Toronto, Toronto, Ontario, M5S 1A1, Canada, to whom all applications and the names and addresses of three referees should be sent. Position open until filled.

UNIVERSITY OF TORONTO, ERINDALE COLLEGE. Department of Botany. Applications are invited for a tenure stream appointment (subject to final administrative approval) for an assistant professor in Mycology to start July 1, 1980. A doctoral degree is required. Undergraduate teaching duties include Mycology and possibly some Introductory Biology. The successful candidate is expected to establish a rigorous research programme concomitant with graduate teaching. Salary will depend upon experience; salary floor (1979-1980): \$17,400. Applicants should forward a curriculum vitae, and arrange to have three (3) letters of reference sent directly to: Dr. W.G. Campbell, University of Toronto, Mississauga Campus, University of Toronto, Mississauga, Ontario, Canada, L5S 1C6. Closing date for applications is May 1, 1980.

UNIVERSITY OF BRITISH COLUMBIA. Department of Zoology. Applications are invited for the position of Assistant Professor in the Department of Zoology, University of British Columbia. The successful applicant will be expected to teach and undertake a strong experimental research programme in invertebrate embryology and morphogenesis. Newly graduated Ph.D. with no more than 2 years postdoctoral research experience. Salary range: \$20,000-\$21,500. Curriculum Vitae and the names of 3 referees should be submitted to: Dr. G.G.E. Scudder, Head, Department of Zoology, University of British Columbia, No. 2354-6270 University Boulevard, University Campus, Vancouver, B.C. V6T 2A9, Canada. The expected date of appointment is July 1, 1980, subject to budgetary approval. Closing date for applications is when position is filled.

ACADIA UNIVERSITY. Department of Biology. Applications are invited for a tenure track position in the Biology Department at Acadia University. Applicants should have a Ph.D. with research experience in mammalian ecology and parasitology, and expected to teach undergraduate general biology and upper level courses in area specialty; must direct graduate and honours studies and develop an active research program. Salary negotiable, according to qualifications and experience. Applications open until July 1, 1980, subject to final budgetary approval. Applications received until May 15, 1980. Send applications to: Dr. D. Dods, Department of Biology, Acadia University, Wolfville, Nova Scotia, BOP 1X0.

UNIVERSITY OF WATERLOO. Department of Biology. Applications are being accepted for the position of Assistant Professor in Biology. Qualifications include Ph.D., specializing in quaternary ecology. Duties include teaching in area of specialization at undergraduate and graduate levels and developing a program of research in quaternary ecology, with emphasis on palynology. Assistant Professor. The interest-free term should send applications to: Dr. J.K. Morton, Chairman, Department of Biology, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1. Effective date of appointment is July 1, 1980. Closing date for receipt of applications is April 30, 1980. Note: This appointment is for a 2-year definite term (subject to availability of funds). First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by this position.

ACADIA UNIVERSITY. Biology Department. The Biology Department at Acadia University expects to have a 10-month sabbatical replacement position at the Assistant Professor level during the 1980-81 academic year. Applicants for the position should hold the Ph.D. degree with teaching experience and be prepared to teach Comparative Vertebrate Anatomy and one other course. The salary is commensurate with qualifications and experience and the effective

date of appointment is August 1, 1980 and is subject to budgetary approval. Applications will be received until April 30 and should be addressed to: Dr. J.S. Bleakney, Department of Biology, Acadia University, Wolfville, Nova Scotia, BOP 1X0, Canada.

BUSINESS ADMINISTRATION AND COMMERCE

ACADIA UNIVERSITY. School of Business Administration. Applications are invited for positions at the rank of either Assistant Professor or Associate Professor in the School of Business Administration, Acadia University. The salary offered will be fully competitive and according to qualifications and experience. Applicants should hold the Ph.D. degree or the M.B.A. with considerable experience. Duties comprise undergraduate teaching in one or more of the following fields: finance (especially financial, organizational behaviour, production, information systems, accounting and quantitative methods). The effective date of appointment is July 1, 1980 or later by mutual agreement. Applications should be addressed to: Dr. H.M. Davidson, Chairman, Faculty Appointments Committee, School of Business Administration, Acadia University, Wolfville, Nova Scotia, BOP 1X0.

THE UNIVERSITY OF ALBERTA. Faculty of Business Administration and Commerce. Applications are invited for faculty positions from those with teaching and research interests in: accounting, finance (especially financial theory, corporate finance, or insurance), management science, marketing, business policy, personnel, industrial relations, and legal relations. Ph.D. or equivalent is desirable. Salary and rank dependent on qualifications. Applicants are welcome until positions are filled. Appointments normally effective July 1. Send resume to: Dr. Roger S. Smith, Dean, Faculty of Business Administration and Commerce, University of Alberta, Edmonton, Alberta T6G 2G1. The University of Alberta is an equal opportunity employer.

BISHOP'S UNIVERSITY. Division of Business Administration. Applications are invited for a tenure-stream appointment in accounting at the rank of assistant, associate or full professor effective July 1, 1980. M.B.A. plus professional accounting designation or Ph.D. required. Duties involve undergraduate teaching and research. Salary will be commensurate with qualifications and experience. Send application with curriculum vitae and names of three references to: Dr. K.J. Kuepper, Dean of the Faculty, Bishop's University, Lennoxville, Que., J1M 1Z7.

BROCK UNIVERSITY. Administrative Studies. Applications are invited for new teaching positions. Candidates should have completed in one or more of the following areas: Management, Production/Management Science, Organizational Behaviour, Marketing. A Ph.D. in progress, or the equivalent is preferred. Salary and rank will be commensurate with qualifications and experience. An application, including a curriculum vitae and the names of three referees, should be submitted to: J.R. Hanrahan, Director, School of Administrative Studies, Brock University, St. Catharines, Ontario L2S 3A1.

DALHOUSIE UNIVERSITY. School of Business Administration. Applications are invited from those interested in teaching a summer M.B.A. course, Capital Budgeting. The position requires a Ph.D. or D.B.A. in Finance and significant university experience teaching capital budgeting. The course meets twice a week/2 hours each time, for 3 weeks from July 2, 1980 to August 15, 1980. In addition to class time the instructor is expected to maintain reasonable office hours. Compensation is \$1,350 plus return economy airfare. Interested candidates should contact: Dr. J.H. Schelbel, Director, School of Business Administration, Dalhousie University, Halifax, Nova Scotia, B3H 4A8.

LAURENTIAN UNIVERSITY. School of Commerce and Administration. Applications are invited for faculty positions in the School of Commerce and Administration of Laurentian University. A number of positions are available subject to budgetary approval due to the increased enrolment to the undergraduate programme, new professional development courses and the expectation of introducing the second year of the M.B.A. programme in September 1980. Faculty positions are open in all areas: accounting, financial organizational behaviour, operations management, small business and general management. Rank and salary

will be competitive and commensurate to qualifications and experience. Applicants holding a doctorate degree are preferred but applicants with other qualifications and relevant experience will be considered. The effective date of appointment is July 1, 1980 or later by mutual agreement. Applications and requests for further information should be sent to Professor David J. Hillcup, Director, School of Commerce and Administration, Laurentian University, Sudbury, Ontario, P3E 2C6.

QUEEN'S UNIVERSITY. School of Business. Assistant or Associate Professors. Positions open for applicants holding Ph.D. Teaching and research duties in any of the principal fields of Accounting and Information Systems, Finance, Production and Operations Management, and Business Policy. Competitive salary levels depending on experience. Candidates of both sexes are equally encouraged to apply. Send resume to: Dean J.R.M. Gordon, School of Business, Queen's University, Kingston, Ontario, K7L 3N6.

SAINT MARY'S UNIVERSITY. Department of Accounting. Openings exist at Saint Mary's University for accounting professors committed to academic excellence and interested in maintaining Saint Mary's traditionally high standards of developing accounting professionals. A combination of professional and academic credentials is sought for permanent and short-term appointments commencing September 1, 1980. Please send resume to: H. Bryan Emerson, Chairman, Department of Accounting, Saint Mary's University, Halifax, Nova Scotia, B3H 3G6.

ST. FRANCIS XAVIER UNIVERSITY. Department of Business Administration. Applications are invited for several positions in the Department of Business Administration for the 1980/81 academic year, pending budgetary approval. Responsibilities include undergraduate teaching and research. Positions are available in the following areas: finance, investments, marketing, organizational behaviour, introduction to business and management. The ability to teach in more than one area is desirable. Ph.D. or Ph.D. candidate or M.B.A. and relevant work experience. Rank and salary will be dependent upon qualifications and experience. St. Francis Xavier University is a co-educational institution of over 2,000 students located in Antigonish, Nova Scotia community with a population of 6,000. The University offers general, major and honours programs through departments in its faculties of Arts and Science. The University is a completely self-sufficient community with residential, recreational and educational facilities to serve the needs of the student body. Interested candidates should forward a curriculum vitae and the name of three references to: Leo T. Gallant, Chairman, Department of Business Administration, St. Francis Xavier University, Antigonish, Nova Scotia.

UNIVERSITY OF SASKATCHEWAN. College of Commerce. One limited term position in Management Science. Qualifications: A Master's degree is required with a background in statistics or operations research. The successful candidate will have the ability to teach undergraduate classes in business statistics. Preference will be given to persons who are interested in pursuing their education leading to a doctorate in Management Science. Rank: Instructor, Lecturer, or Assistant Professor, depending upon the qualifications of the candidate. Effective date of appointment: July 1, 1980. Contact: Dean P. Michael Maher, Ph.D., College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF SASKATCHEWAN. College of Commerce. Positions available: Health Care Administration. Applications are invited for a full-time faculty position in the Health Care Administration section of the Department of Industrial Relations and Organizational Behaviour. Effective date of Appointment: July 1, 1980. Responsibilities: 1) Teaching at the graduate, undergraduate and certificate levels. 2) Research leading to acceptable forms of publication. Qualifications: Candidates should hold or be near the completion stage of a Doctorate level degree in a field of study related to health care administration. Candidates with experience and specific formal training in the health care field will be given preference. Rank and salary: Based upon academic qualifications and past experience. Further information: Interested candidates should send resumes to: Professor P. Walmsley, Chairman, Department of Industrial Relations and Organizational Behaviour, College

of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0. Phone: (306) 343-4165.

UNIVERSITY OF SASKATCHEWAN. College of Commerce. Positions available: Organizational Behaviour. Applications are invited for a full-time faculty position in the Department of Industrial Relations and Organizational Behaviour. Effective Date of Appointment: July 1, 1980. Responsibilities: 1) Teaching at the undergraduate and graduate levels in Organizational Behaviour and, if qualifications and experience warrant, possibly in Industrial Relations and Personnel Management. 2) Research leading to acceptable forms of publication. Dual qualifications: Candidates must hold a Ph.D. degree or be at the completion stage of a degree that has as its focus the study of Organizational Behaviour. Study, research, and teaching experience in industrial relations and in the behavioural sciences would also be appropriate. Candidates having an established teaching and research record will be given preferred consideration. Rank and Salary: Based upon academic qualifications including teaching experience, business experience, and research and publications record. Further information: Interested candidates should send resumes to: P.Y. Walsley, Chairman, Department of Industrial Relations and Organizational Behaviour, College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0. Phone (306) 343-4165.

UNIVERSITY OF SASKATCHEWAN. College of Commerce, Department of Management and Marketing. Position in Management: One position, tenurable, involves teaching duties in areas of Business Policy and Introductory Management. Research interests in development and management of small and medium-sized enterprises, particularly welcome. Rank and Salary: Depending on qualifications and experience. Dual qualifications: Doctorate completed or near completion in Management. Business experience will be an additional asset. Effective Date of Appointment: July 1, 1980. Contact: Dr. A.K. Sarkar, Head, Department of Commerce & Marketing, College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0. Phone: (306) 343-3568.

UNIVERSITY OF SASKATCHEWAN. College of Commerce, Department of Management and Marketing. Positions in Management and Marketing: 1) One position, tenurable, involves teaching duties in areas of Business Policy and Introductory Management. Research interests in development and management of small and medium-sized enterprises will be particularly welcome. 2) One position, on a visiting or term appointment basis, for one or two years involves teaching in Physical Distribution Management and another area of interest in Marketing. Research interests in logistics and transportation and Marketing Planning will be particularly welcome. Rank and Salary: Depending on qualifications and experience. Dual qualifications: Doctorate completed or near completion in Management and/or Marketing. Business experience will be an additional asset. Effective Date of Appointment: July 1, 1980. Contact: Dr. A.K. Sarkar, Head, Department of Management and Marketing, College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0. Phone (306) 343-3568.

UNIVERSITY OF SASKATCHEWAN. College of Commerce. One Tenurable Position in Finance. Rank and Salary: Depending upon academic qualifications and experience of the candidate. Dual qualifications: Doctorate completed, or nearing completion. In Finance. A strong potential for research is required. Teaching at the graduate and undergraduate courses in Corporate Finance, Financial Institutions, Investments, Insurance, and International Finance. Effective Date of appointment: July 1, 1980. Contact: Dean P. Michael Maher, Ph.D., College of Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF SASKATCHEWAN. College of Commerce. One or Two Limited Term Positions in Finance. Qualifications: A Master's Degree in Business Administration with concentration in Corporate Finance. Ability to teach undergraduate classes is desirable. Preference will be given to persons who are interested in pursuing their education leading to a doctorate in Finance. Rank: Instructor, Lecturer, or Assistant Professor, depending upon the qualifications of the candidate. Effective date of appointment: July 1, 1980. Contact: Dean P. Michael Maher, Ph.D., College of

Commerce, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

MCMASTER UNIVERSITY. Faculty of Business. Applications are invited in the following areas: (i) Accounting, (ii) Business Policy, (iii) Finance, (iv) Management Information Systems, (v) Marketing and International Business, (vi) Marketing Research, (vii) Production and/or Management Science. Rank depends on qualifications and experience, preferably at the Assistant or Associate Professor level. Visiting appointment is also possible. Ph.D. or DBA degree is expected, preferably with teaching and research experience. Duties include research and teaching at both graduate and undergraduate levels. Applicants for Management Information Systems, Production and/or Management Science will be expected to contribute to the Ph.D. program in these areas. Applicants in both fields of Marketing will have to teach courses in Introductory Marketing. International Business will include courses in International Marketing and Comparative Marketing. Marketing Research will include advanced research methodology covering qualitative and quantitative aspects. Salary will commensurate with qualifications, teaching and practical experience. Appointment date is open July 1st, 1980 is preferred. Application date closes when position is filled. Applications should be sent to: Dr. A.Z. Szendrovi, Dean, Faculty of Business, McMaster University, Hamilton, Ontario, L8S 4L4.

CARLETON UNIVERSITY. School of Commerce. Applications are invited for a tenure track position at the Assistant or Associate Professor level in the following areas of interest: (i) accounting, (ii) systems analysis/data processing, or (iii) management science. Dual qualifications required: Ph.D. Application should be sent to: Dr. W.L. Weber, Chairman, Recruiting Committee, School of Commerce, Carleton University, Ottawa, K1S 5B6. Appointment to commence July 1, 1980.

UNIVERSITY OF WATERLOO. Department of Commerce. Applications are invited for several faculty positions from those with teaching and research interests in accounting, auditing, taxation and finance. Doctorate in hand or near completion is preferred but candidates who plan to pursue doctoral studies in the future will be considered. Teaching excellence is required; research potential is desirable. Ranks open and salaries competitive depending upon education and experience. Appointments will be from September 1, 1980 but other dates can be arranged due to the flexibility provided by our year round co-op programmes. Applications or inquiries, including curriculum vitae, should be sent to Professor Robert Long, Director of Accounting Programmes, Department of Economics, University of Waterloo, Waterloo, Ontario, N2L 3G1. First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by these positions. Availability of these positions is subject to budgetary approval.

SCIENCES DE L'ADMINISTRATION

UNIVERSITÉ LAVAL. Faculté des sciences de l'administration. Département de marketing. D'ici 1981, avons 1 à 3 nouveaux postes pour jeunes professeurs possédant doctorat ou étant en rédaction de thèse. Équipe actuelle assez forte et comportement du consommateur; préférence trait d'autres champs d'intérêt. Offrons programme dans les trois cycles. Aussi, recherche et bureau de consultation. Ambiance générale agréable, novatrice, accent international. Adresser curriculum vitae ou demande d'information au Directeur du Département de marketing, Faculté des sciences de l'administration, Université Laval, Ste-Foy (Québec), G1K 7P4, téléphone (418) 656-3042.

CHEMISTRY/CHEMIE

UNIVERSITY OF WINNIPEG. Department of Chemistry. Title of Position: Assistant Professor (sabbatical replacement). Qualifications: Ph.D. preferred. Duties: Teaching Introductory and Advanced Physical Chemistry courses along with instruction in

the Advanced Physical Chemistry Laboratory program. Salary: Dependent on qualifications and experience. Person to Whom Applications Should Be Sent: Dr. F.W. Barth, Search Committee Chairman, Chemistry Department, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba, R3B 2E9. Date of Appointment: September 1, 1980. Closing Date: June 1, 1980.

UNIVERSITY OF SASKATCHEWAN. Department of Chemistry and Chemical Engineering. Applications are invited from qualified candidates for appointments as Postdoctoral Fellows and Research Associates in the following fields of chemistry and chemical engineering: Quantum chemical calculations on conformational changes and chemical reactions; photochemistry and radiation chemistry of transitional metal complexes; laser photochemistry, photophysics and spectroscopy; organometallic chemistry and organic reaction mechanisms, electron spin resonance studies of silicates and radicals, chemical reactions generated by ultrasound, dynamics of fast reactions using ultrasonic techniques, corrosion engineering, catalysis, production of liquid and gaseous fuels from coal. These positions are renewable initially for one year, renewable at rate up to the maximum allowed by the NSERC grant regulations. Send curriculum vitae, transcripts and letters from three referees to the undersigned, from whom further particulars may be obtained. Professor A.R. Knight, Chairman, Department of Chemistry and Chemical Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0, Canada. Telephone 306-343-2933.

UNIVERSITY OF SASKATCHEWAN. Department of Chemistry and Chemical Engineering. Chemistry. Position: Assistant Professor, tenurable position. Qualifications required: Ph.D. in Analytical Chemistry and postdoctoral experience. Duties: To develop and teach undergraduate and graduate courses in analytical chemistry and establish a vigorous research program. Salary: Current salary rates under negotiation. Apply to: Dr. A.R. Knight, Head, Department of Chemistry and Chemical Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0. Effective Date: Preferably July 1, 1980.

UNIVERSITÉ LAVAL. Département de chimie. Professeur en chimie minérale ou analytique. Le Département de chimie de l'Université Laval sollicite des candidatures à un poste régulier de professeur en chimie minérale ou analytique. Selon l'expérience du candidat, l'engagement peut se faire au niveau de professeur adjoint, agrégé ou titulaire. Le candidat devra posséder un Ph.D. en chimie minérale ou analytique et de préférence une expérience postdoctorale. Une expérience équivalente dans des disciplines connexes pourra être considérée favorablement. Les candidats non-anglophones devront en mesure d'acquiescer à brève échéance une maîtrise suffisante de la langue française. Le candidat choisi devra participer à l'enseignement de la chimie et développer un programme de recherche dans le domaine de sa spécialité. Les candidats sont priés de faire parvenir leur curriculum vitae accompagné de la description de leur domaine de compétence, d'un bref exposé du programme de recherche prévu et des noms de trois répondants, à: M. Jacques Léonard, Directeur, Département de chimie, Université Laval, Québec, Qué., G1K 7P4.

UNIVERSITY OF WATERLOO. Department of Chemistry. Applications are being accepted for the position of Assistant Professor or Junior Associate Professor in Organic Chemistry. The areas of Bioorganic, Organic Electrochemistry, Polymer Organic or organometallic Chemistry are of particular interest. In addition to being an excellent teacher, the successful candidate will be expected to initiate a vigorous and innovative research program. Excellent opportunities for research exist within the Guelph-Waterloo Centre for Graduate Work in Chemistry. Present Assistant Professor minimum \$18,000. Submit curriculum vitae and funds. Applicants should submit a complete curriculum vitae, an outline of research plans and names of three referees to: Dr. D.E. Irish, Chairman, Department of Chemistry, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1. Effective date of appointment is July 1, 1980 or January 1, 1981. Closing date for receipt of applications is May 30, 1980. First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by this position.

CHILD CARE

UNIVERSITY OF VICTORIA. School of Child Care. The School of Child Care at the University of Victoria has a senior faculty position available July 1, 1980. Training and clinical experience in neonatal assessment, early childhood development and infant intervention programmes is necessary. Send applications to: Dr. Roy V. Ferguson, Director, School of Child Care, University of Victoria, P.O. Box 1700, Victoria, B.C., V8W 2Y2.

COMPUTER SCIENCE/INFORMATIQUE

UNIVERSITY OF GUELPH. Department of Computing and Information Science. The Department of Computing and Information Science is seeking a probationary/tenure track appointment at the assistant or associate professor level. Ph.D. in Computing Science or related discipline is required, although suitable industrial experience would be considered. The successful applicant will be required to teach and carry out research in one or more of the following areas: Database methodology, Software engineering, Operating systems, Mini-Micro Computers, System analysis and design, Decision support systems, Data communications and Systems development methodology. The Department of Computing and Information Science has access to an AMDAHL V5 using CMS, a DEC VAX machine using VMS, two PDP11/34's using UNIX as well as a number of microcomputers. The appointment will be filled subject to budgetary approval. All interested candidates should submit a curriculum vitae with names of three references as soon as possible to Professor J. Linders, Chairman, Department of Computing and Information Science, University of Guelph, Guelph, Ontario, N1G 2W1.

UNIVERSITÉ LAVAL. Faculté des sciences et de génie. Département d'informatique. Le Département a un poste de professeur à pourvoir à partir de juin 1980. On recherche une personne spécialisée en informatique de gestion. La préférence sera accordée aux candidats intéressés par les applications des bases de données pour des fins de gestion, par les systèmes d'information ou par l'automatisation des processus administratifs. Le diplôme de doctorat est requis. On considérera aussi les personnes susceptibles d'être diplômées bientôt et celles qui, à défaut d'avoir le doctorat, présentent un dossier exceptionnel de réalisations. Les candidats intéressés doivent faire parvenir leur curriculum vitae à: Dr. André Dubucq, Directeur, Département d'informatique, Faculté des sciences et de génie, Pavillon Poulton, bureau 202-A, Université Laval, Cité universitaire (Québec), G1K 7P4. Tél: (418) 656-4430.

UNIVERSITY OF SASKATCHEWAN. Department of Computational Science. Position: Assistant Professor (2 positions). Qualifications: Ph.D. in Computer Science or a closely related discipline. Must have interest and background in one or more of: Systems analysis and design, translator writing, business information systems, database, design, software engineering, programming languages, artificial intelligence, operating systems, computer graphics, microcomputers. Duties: Undergraduate and graduate teaching and research. Salary: Determined by qualifications and experience. Apply to: Dr. J.E. Cooke, Head, Department of Computational Science, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0. Closing Date: This position is filled. **THE UNIVERSITY OF CALGARY.** Department of Computer Science. Applications are invited for faculty positions at the Assistant or Associate Professor level. One or two positions are expected to be available, subject to budget approval, at competitive salaries. Applicants should have a Ph.D. degree in Computer Science or a related discipline, or should expect to complete such a degree before the 1980-81 academic year. Preference will be given to applicants with research interests in one of the following areas: Computer Architecture, Real-Time Systems, Computer Networks, Graphics or Data Base Management. Enquiries and applications, the latter including a curriculum vitae and the names of three references, should be sent to: Dr. A.W. Collin, Head, Department of Computer Science, The University of Calgary, 2920 - 24th

Avenue, N.W., Calgary, Alberta, T2N 1N4, Canada.

UNIVERSITY OF TORONTO, SCARBOROUGH COLLEGE, Physical Sciences Division, Computer Science. Applications are invited for a one-year visiting or limited term assistant professor for July 1, 1980 or September 1, 1980. Applicants must have a Ph.D. in Computer Science. The duties will include teaching at the undergraduate level and research. Send curriculum vitae and the names of three referees to: Professor John E. Dove, Chairman, Physical Sciences Division, Scarborough College, University of Toronto, 1265 Military Trail, West Hill, Ontario, M1C 1A4, Canada.

UNIVERSITY OF WINNIPEG, Department of Mathematics. Title of Position: Assistant Professor, Sessional or Probationary Appointment. Qualifications: Ph.D. in Computer Science. Nature of Duties: To teach undergraduate courses in Computer Science. Salary: Commensurate with qualifications and experience. Person to Whom Inquiries Should be Sent: Professor W.C. Campbell, Department of Mathematics, University of Winnipeg, Winnipeg, Manitoba, R3B 2E9. Date of Appointment: September 1, 1980. Closing Date: When position filled.

DENTISTRY

THE UNIVERSITY OF ALBERTA, Faculty of Dentistry. Applications are invited for the full-time (or part-time) positions of director and assistant director for a teaching evaluation project. The Association of Canadian Faculties of Dentistry is conducting a National Clinical Competency Evaluation Project to evaluate clinical teaching and evaluation in most of the Canadian dental schools. The project will involve collecting and analyzing baseline data, co-ordinating evaluation committees, developing and testing the methodology for evaluating the clinical competency of undergraduate dentistry and dental hygiene students. This five-year project will commence in the fall of 1980, and it will be university based with the location yet to be determined. Preference will be given to applicants with experience in student evaluation and measurement and/or knowledge of clinical dentistry. Salary is commensurate with experience. Applications, including curriculum vitae and names of references, should be sent to Dean G.W. Thompson, Faculty of Dentistry, Room 3036 Dentistry/Pharmacy Centre, The University of Alberta, Edmonton, Alberta, T6G 2N8, before April 30, 1980. Inquiries can be made by phoning Dr. Thompson at (403) 432-3312.

UNIVERSITY OF SASKATCHEWAN, College of Dentistry. New position — Oral Surgery/Hospital Dentistry. Subject to budgetary confirmation for July 1/80. Applications are invited for a full-time position in the Department of Oral Surgery and Anaesthesia in the College of Dentistry. Responsibilities encompass research and service activities along with didactic and clinical teaching to undergraduate students, and residents in the University Hospital Dental Department. Preference will be given to candidates who have a D.M.D. degree (or equivalent) and a graduate degree and/or certification in Oral Surgery. Salary is commensurate with education and experience, and intramural practice facilities and D.R. privileges are available. Applicants should be eligible for licensure in the Province of Saskatchewan. All inquiries and curriculum vitae should be forwarded to: Dean E.R. Ambrose, Chairman, Search Committee, College of Dentistry, University of Saskatchewan, Saskatoon, Saskatchewan, Canada. S7N 0W0.

DRAMA

UNIVERSITY OF ALBERTA, Department of Drama. Cutter and Costume Designer. The University of Alberta, Department of Drama, seeks a full time Sessional Lecturer in Cutting and Costume Design. Applicant would be required to teach costume building and cutting with supporting skills. Some teaching of costume design would be appropriate. Wide experience in cutting, dyeing and texturing is essential. The position is one deeply involved with the BFA and MFA professional program. Wardrobe facilities are excellent and include two large costume shops to supply a vigorous Acting and Design program. This is a one year ap-

pointment from September 1, 1980 to April 30, 1981. The University of Alberta is an Equal Opportunity Employer. Send applications, curriculum vitae, vital statistics and at least three letters of reference to: Dr. James H. McTeague, Chairman, Department of Drama, University of Alberta, Edmonton, Alberta, Canada, T6G 2G9.

UNIVERSITY OF ALBERTA, Department of Drama. The University of Alberta, Department of Drama has a vacancy for a seasonal lecturer for the period September 1, 1980 to April 30, 1981. Applicant would teach undergraduate courses in Introduction to Theatre, Acting and a course in undergraduate in Directing. Send applications, curriculum vitae, vital statistics and at least three letters of reference to: Dr. James H. McTeague, Chairman, Department of Drama, University of Alberta, Edmonton, Alberta, Canada, T6G 2G9. The University of Alberta is an Equal Opportunity Employer.

BISHOP'S UNIVERSITY, Drama and Theatre Arts. Applications are invited for a possible position, a one-year appointment at the rank of Lecturer or Assistant Professor effective July 1, 1980. Candidates holding a Ph.D. or equivalent are preferred. Duties involve the teaching of dramatic literature at all levels; especially Renaissance. The 1978-79 salary floors of the University were as follows: Lecturer \$16,640, Assistant Professor \$20,800. New floors are under negotiation. Applications with curriculum vitae and names of three referees should be addressed to: Dr. K.J. Kuepper, Dean of the Faculty, Bishop's University, Lennoxville, Québec, J1M 1Z7. **BISHOP'S UNIVERSITY, Drama and Theatre Arts.** Applications are invited for a tenure-stream appointment at the rank of Assistant or Associate Professor effective July 1, 1980. Candidates who are graduates of a professional training programme, have some teaching experience in a professional school or university and are familiar with Canadian professional theatre will be considered. Duties involve acting and directing courses at all levels. The 1978-79 salary floors of the University are as follows: Assistant Professor \$20,800, Associate Professor \$27,040. New floors are under negotiation. Applications with curriculum vitae and names of three referees should be addressed to: Dr. K.J. Kuepper, Dean of the Faculty, Bishop's University, Lennoxville, Québec, J1M 1Z7. Also, there is a possibility for the person to work with Festival Lennoxville and university productions.

MC GILL UNIVERSITY, English Department. One year leave replacement from September 1, 1980 — August 1981. Non-renewable Lecturer or Assistant Professor level. Drama: 9 hour teaching load including Voice and Speech, Acting, Period and Style, Aesthetic Theories of Drama. Appropriate academic credentials required and teaching theatre experience. Contact Professor David Williams, Chairman, Department of English, McGill University, Arts Building, 853 Sherbrooke Street West, Montreal, Québec, H3A 2T6.

UNIVERSITY OF SASKATCHEWAN, Department of Drama. Instructional and 2nd year undergraduate stagecraft program. The successful applicant will be responsible for teaching introductory and intermediate stagecraft skills. The variety of skills to be taught are in lighting application, set construction, sound production, tool knowledge and usage, electricity, drawing interpretation and basic skills. In addition to this, the successful applicant assumes the responsibilities of resident Technical Director. He or she assumes the responsibility of supervising set construction and lighting of all plays in the production program. **Head of Artist-in-Residence.** The successful applicant for acting instruction at the introductory level, focusing on fundamental techniques of speech and performance, and directing in-class readings and supplementary department productions. In addition to teaching responsibilities, the successful applicant will participate as an actor or director in department productions. Instructor for 2nd and 3rd year undergraduate acting program. The successful applicant will be responsible for teaching theoretical and practical approaches to acting styles and techniques on an intermediate and advanced level. A major portion of the course will be in the area of vocal training. In addition to teaching, the successful applicant will be responsible for duties in the production program; these duties will be assigned by the Head of the department. Applicants should have undergone professional and/or university training and worked in the professional theatre; experience in the teaching of the above skills is also desirable. Apply to: Tom Kerr, Head, Drama Department, University of Saskatchewan, Saskatoon, Saskat-

chewan, S7N 0W0.

ECONOMICS

ACADIA UNIVERSITY, Department of Economics. Applications are invited for a full time faculty position at the Lecturer or Assistant Professor Rank, Doctorate or near completion required. Preference will be given to applicants who have the background to teach at the undergraduate level and conduct research in two of the following preferred areas: public finance, international economics, urban economics, economics of agriculture, resource economics. Qualified persons with other areas will be considered. Salary according to qualifications and experience. The position offered is subject to budgetary and contractual constraints. Applications, including curriculum vitae, transcripts and names of references should be sent to Dr. R.A. French, Acting Head, Department of Economics, Acadia University, Wolfville, Nova Scotia, B0P 1X0.

CONCORDIA UNIVERSITY, Department of Economics. Faculty Positions. Possibility of two appointments at ranks commensurate with the candidate's qualifications. Applicants with main or secondary specialization in one or more of the following areas are invited to apply: General Theory, Industrial Relations-Labour Economics, and Economic History. Strong candidates in other areas will also be considered. Graduate and undergraduate teaching and supervision of Ph.D. dissertations. Required economist for a senior level position in the Department of Economics. Suitable candidate will also serve as the Director of the Institute of Applied Economic Research. Candidates with strong publication record and experience in various areas of applied economic research are invited to contact: Prof. B.S. Sahni, Chairman, Department of Economics, Concordia University, 1455 De Maisonneuve Blvd., West, Montreal, Quebec.

CONCORDIA UNIVERSITY, Department of Economics. Economist, Senior Faculty Position. Required economist for a senior level position in the Department of Economics. Suitable candidate will also serve as the Director of the Institute of Applied Economic Research. Candidates with strong publication record and experience in various areas of applied economic research are invited to contact: Prof. B.S. Sahni, Chairman, Department of Economics, Concordia University, Montreal (514) 879-5823.

UNIVERSITY OF NEW BRUNSWICK, Department of Economics. Applications are invited for a position (rank depends on experience) July 1, 1980. Ph.D. or wide practical experience. Duties: graduate and undergraduate teaching, and research interest in regional Economics. Salary under negotiation. Send curriculum vitae and names of three referees to: Prof. C.M. Waddell, Chairman, Dept. of Economics, P.O. Box 4400, Fredericton, New Brunswick, E3B 5A3.

UNIVERSITY OF NEW BRUNSWICK, Department of Economics. Applications are invited for a position (sabbatical replacement) as Lecturer or Assistant Professor, July 1, 1980. Ph.D. or equivalent. Duties: graduate and undergraduate teaching and research interest in macrotheory. Salary under negotiation. Send curriculum vitae and names of three referees to: Prof. C.M. Waddell, Chairman, Dept. of Economics, P.O. Box 4400, Fredericton, New Brunswick, E3B 5A3.

UNIVERSITY OF SASKATCHEWAN, Department of Economics and Political Science. An opening is available for a one year appointment at the lecturer or assistant professor level in economics to teach principles and theory at the undergraduate level. Ph.D. preferred, some teaching experience desirable. Normal starting date is July 1, 1980. Salary upwards of \$18,415 (1978-79 scale) per annum for the assistant professor rank. Application, including curriculum vitae and names of three referees, should be sent to Professor K. Lal, Acting Head, Department of Economics and Political Science, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

UNIVERSITY OF VICTORIA, Department of Economics. Applications are invited for the position of a Visiting Lecturer for the period September 1, 1980 to April 30, 1981. Duties will include teaching courses in Organizational Behaviour and Accounting. Candidates with an M.B.A. or a Ph.D. in Business will be considered. Closing date for applications is April 30, 1980 or when position filled. Please send applications to: Dr. L. Laudadio, Chairman, Department of Economics, University of Victoria, P.O. Box 1700, Victoria, B.C. V8W 2Y2.

THE UNIVERSITY OF WINNIPEG, Depart-

ment of Economics. Title of Position: Two year appointment, possibly leading to probationary appointment. Qualifications: Ph.D. Nature of Duties: To teach undergraduate courses in macroeconomics, international economics and industrial organization. Salary: Commensurate with qualifications and experience. Person to Whom Inquiries Should be Sent: Dr. Sylvester Dainoff, Department of Economics, University of Winnipeg, Winnipeg, Manitoba, R3B 2E9. Date of Appointment: September 1, 1980. Closing Date: When position filled.

UNIVERSITY OF MANITOBA, Department of Economics. Tenure-stream and one or more sessional appointments at Assistant Professor rank for distinguished applicants. Candidates should have Ph.D. or be near completion. Expertise in the following areas are preferred: Money and Banking, International Trade and Finance and Applied Econometrics, but all fields of interest are acceptable for outstanding applicants. Familiarity with the Canadian economy is an asset. The position involves research and teaching at undergraduate and possibly graduate levels. Salary is competitive. Applicants should send their cv with the names of three referees to: Dr. Cy Gonick, Department of Economics, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. Applications will be accepted until the position is filled. Availability of the position is subject to budgetary approval.

EDUCATION

UNIVERSITY OF NEW BRUNSWICK, Faculty of Education. Special Education. A faculty member is required at the Assistant, Associate, or Full Professor level to teach primarily undergraduate courses in Special Education to students who are preparing to teach in Elementary schools. The initial appointment would be for one year beginning July 1, 1980. Salary negotiable. Ph.D. in Special Education preferred, with some school experience. Please apply to: Dr. Marian Small, Chairman, Division of Curriculum and Instruction, Faculty of Education, University of New Brunswick, P.O. Box 4400, Fredericton, New Brunswick, E3B 5A3.

INSTITUT D'ETUDES PEDAGOGIQUES DE L'ONTARIO, Centre de recherche en éducation franco-ontarienne. L'Institut d'études pédagogiques de l'Ontario recherche un professeur en éducation pour le Centre de recherches en éducation franco-ontarienne. Ce poste est sujet à l'approbation du Conseil des Gouverneurs. Nature des fonctions: Initier et conduire des projets de recherche en éducation et développement régional appropriés aux besoins des écoles de langue française de l'Ontario et/ou offrir des cours menant à la maîtrise et au doctorat. Le/la candidate(s) doit posséder une formation appropriée au poste (doctorat ou autre titre supérieur). La préférence sera accordée aux candidats ayant une connaissance approfondie des problèmes connexes à l'éducation en langue française dans une situation minoritaire. Traitement: Selon les qualifications et l'expérience. Date d'entrée en fonction: 1er juillet 1980. Ce poste est pour une durée d'un an, renouvelable. Faire parvenir avant le 30 avril 1980, votre acte de candidature et votre curriculum vitae à: M. Mark Holmes, Coordinateur du Développement régional, L'Institut d'études pédagogiques de l'Ontario, 252, rue Bloor ouest, Toronto, Ontario, M5S 1V6.

SIMON FRASER UNIVERSITY, Faculty of Education. Visiting Assistant Professor — Science Education. Assistant Professor in the field of Science Education, secondary and elementary. The preferred applicant will also have a background in Environmental Education, especially from an interdisciplinary perspective. The position will entail teaching in the undergraduate, graduate and teacher education (professional) programs in the field of Curriculum Methodology. Salary dependent on qualifications. Send full curriculum vitae and the names of three referees to: Dr. J.W. George Ivany, Dean of Education, Simon Fraser University, Burnaby, B.C. V5A 1S6. Effective September 1, 1980. Closing date: when position filled.

SIMON FRASER UNIVERSITY, Faculty of Education. Visiting Assistant Professor — Educational Administration. Visiting appointment, term flexible. Ph.D. in Educational Administration, university teaching experience, broad range of research interests. Graduate courses in Educational

Administration, including Methods of Enquiry, and supervision of student theses. Salary dependent on qualifications. Send full curriculum vitae and the names of three referees to: Dr. W. George Ivany, Dean of Education, Simon Fraser University, Burnaby, B.C. V5A 1S6. Effective September 1, 1980. Closing date: when position filled.

UNIVERSITY OF MANITOBA. Continuing Education Division. 1. Program Coordinator, within the Continuing Education Division, at the rank of Lecturer. 2. Graduate training of adults in Continuing Education (minimum of Master's Degree, Doctorate preferred). Preference will be given to candidates who also have graduate training and/or experience in the field of Management Administration. 3. Responsible for the design, development and implementation of non-degree programs in the area of Management and Business Administration. 4. Salary range: \$18,000 — \$20,000 depending on qualifications and experience (salary schedule to be revised effective April 1, 1980). 5. Dr. R. Kristjansson, Director of Non-degree Programs, 541 University Centre, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. 6. When position filled. 7. May 1, 1980. 8. Canadian citizens, landed immigrants and others eligible at the time of application are especially encouraged to apply.

UNIVERSITY OF MANITOBA. Continuing Education Division. Access Program. Academic Assistant. The University of Manitoba Access Program is designed to provide university training for people who have not had the opportunity for such experience because of social, economic and cultural reasons, lack of formal education or residence in remote areas. Qualifications: Minimum degree — Masters in Arts, Science, Education or Graduate Degree. Knowledge of university academic program desirable, experience in tutoring and tutorial services an asset. Responsibilities: To provide individualized and small group instruction, study skills and referral services on academic matters, management and program planning for university students, orientation of new students to university setting. Salary: \$14,000 — \$18,000 depending on experience and qualifications. Applications will be accepted up to May 1, 1980. Duties to commence April 1980. Canadian citizens, landed immigrants and others eligible at the time of application are especially encouraged to apply. Applications, including detailed resume, should be sent to: Dr. D.H. Poonwasse, Coordinator, University of Manitoba Access Program, Continuing Education Division, 541 University Centre, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. This position is subject to budget approval.

ONTARIO INSTITUTE FOR STUDIES IN EDUCATION. Department of Sociology in Education. Applications are invited for a one-year position, possibly renewable, to the Department of Sociology in Education. The department carries out graduate studies, research and field development in education in four broad program areas — applied sociology, feminist studies, marxist studies, and the sociology of knowledge. The person hired would be expected to coordinate the Ed.D. program, as well as work with M.Ed. and Ph.D. students. Coordination would involve both on-campus and off-campus programs. Demonstrated scholarly accomplishment at the graduate level would be a requirement. The person should be skilled in the teaching of field methods, applied sociology, and able to carry out field based research. The substantive areas of work in sociology of education are open, but could include one or more of the following interests — schooling, deviance, multiculturalism, community education, labour education. The appointment is contingent on the approval of the Board of Governors. Applications with curriculum vitae should be sent to Dr. Michael Fullan, Chair, Department of Sociology in Education, OISE, 252 Bloor Street West, Toronto, Ontario, M5S 1V6. Starting date for position: July 1, 1980.

BRANDON UNIVERSITY. Faculty of Education. Innovative Educators Wanted. Brandon University has centre co-ordinator positions open for teacher educators. These positions, to be located in remote northern communities in Manitoba, are in the Brandon University Northern Teacher Education Program (BUNTEP) for training teachers. A vigorous attempt is made to deliver the program in the students' home communities. Duties of the Centre Co-ordinator include: A. Co-ordinating activities for the university in off campus locations; B. Supervision of student teachers; C. Teaching responsibilities will normally be 1/3 load; D.

Academic counselling; E. Participating co-operatively in the development of the program; F. Working closely with the community to explain and develop the program; G. Working in a cross cultural situation with native Canadian students. Qualifications: 1. Minimum of M.Ed. or M.A. degree and valid teaching certificate with a specialization in some area of school curriculum. 2. School level teaching experience is required with elementary school experience considered an asset. Duties to commence September 1, 1980. Salary and Rank: In accordance with qualifications and experience. Salary range: \$14,440 — \$27,300. Candidates should mail letter of application and curriculum vitae, request Registrar to mail transcript, and request three referees to submit their recommendations to: Dr. Peter Klassen, Associate Dean, Faculty of Education, Brandon University, Brandon, Manitoba, R7A 6A9.

THE UNIVERSITY OF ALBERTA. Faculty of Dentistry. Applications are invited for the position of part-time (20 hours per week) and assistant director for a teaching evaluation project. The Association of Canadian Faculties of Dentistry is conducting a National Clinical Competency Evaluation Project to evaluate clinical teaching and evaluation in most of the Canadian dental schools. The project will involve collecting and analyzing baseline data, co-ordinating evaluation committees, developing and testing the methodology for evaluating the clinical competency of undergraduate dentistry and dental hygiene students. This five-year project will commence in the fall of 1980, and it will be university based with the location yet to be determined. Preference will be given to applicants with experience in student evaluation and measurement and/or knowledge of clinical dentistry. Salary is commensurate with experience. Applications, including curriculum vitae and names of references, should be sent to Dean G.W. Thompson, Faculty of Dentistry, Room 3036 Dentistry/Pharmacy Centre, The University of Alberta, Edmonton, Alberta, T6G 2N8, before April 30, 1980. Inquiries can be made by phoning Dr. Thompson at (403) 432-3312.

UNIVERSITY OF CALGARY. Department of Educational Curriculum and Instruction. Mathematics Education. Department of Educational Curriculum and Instruction is actively seeking applicants for an Assistant Professor level position in Mathematics Education. The appointment will be effective either July 1 or September 1, 1980. Responsibilities include teaching undergraduate courses in Mathematics Education for elementary school teachers, supervision of student teachers and graduate students, and conducting research. The salary will be approximately \$22,000. Applicants with a doctorate and elementary school teaching experience are especially encouraged to apply. Applications will be accepted until the position is filled. Applicants should send three letters of recommendation to: Dr. Ralph M. Miller, Head, Department of Educational Curriculum and Instruction, The University of Calgary, 2500 University Drive, Calgary, Alberta, T2N 1N4.

UNIVERSITY OF LETHBRIDGE. Faculty of Education. Early Childhood Education. 1. Title: Assistant Professor. 2. Qualifications: Expertise in Curriculum and Instruction for Early Childhood Education. Supporting expertise in one or more of the following: English, Reading, Educational Psychology, Interpersonal Relations/Communications Skills. Demonstrated teaching excellence at the Early Childhood level required and at the university level desired. 3. Duties: Offer courses in Curriculum and Instruction for Early Childhood to students preparing to teach in kindergartens or elementary grades. Supervise student teachers in various phases of field experience. Offer in-service workshops for teachers and consult with Early Childhood agencies in the geographic area. 4. Salary: Commensurate with qualifications and experience. 1979-80 range: \$20,446 to \$28,616. 5. Applications: Letter of application, full curriculum vitae and names of three references to be sent to: Dr. J.M. Thorlacius, Dean, Faculty of Education, The University of Lethbridge, Lethbridge, Alberta, Canada, T1K 3M4. 6. Effective date of appointment: July 1, 1980. Closing date for applications: April 30, 1980.

UNIVERSITY OF LETHBRIDGE. Faculty of Education. Drama Education. 1. Title: Assistant Professor. 2. Qualifications: Expertise in Drama Education. Supporting strength in one or more of the following: English, Reading, Interpersonal Relations/Communications Skills. Experience in working with elementary and secondary school students in the field of Drama.

Demonstrated teaching excellence. Competence in performance and teaching in the Dramatic Arts. 3. Duties: Supervise elementary and secondary student teachers and provide in-service training and workshops for teachers. Instruct in areas of supporting expertise according to need. 4. Salary: Commensurate with qualifications and experience. 1979-80 range from \$20, 446 to \$28,616. 5. Applications: Letter of application, full curriculum vitae and names of three references to be sent to: Dr. J.M. Thorlacius, Dean, Faculty of Education, The University of Lethbridge, Lethbridge, Alberta, Canada, T1K 3M4. 6. Effective date of appointment: July 1, 1980. 7. Closing date for applications: April 30, 1980.

UNIVERSITY OF LETHBRIDGE. Faculty of Education. Art Education. 1. Assistant Professor. 2. Experience in working with elementary and secondary school students in the field of Art. Demonstrated teaching excellence. Competence and teaching experience in the field of Art. 3. Work specifically with University art majors preparing themselves for teaching in the school system and offer appropriate courses. Provide in-service training and workshops for teachers in the local school system. Supervise student teachers and instruct in other Education courses depending on expertise and interest. 4. Commensurate with qualifications and experience. 1979-80 range from \$20,446 to \$28,616. 5. Letter of application, full curriculum vitae and names of three references to be sent to: Dr. J.M. Thorlacius, Dean, Faculty of Education, The University of Lethbridge, Lethbridge, Alberta, Canada, T1K 3M4. 6. July 1, 1980. 7. April 30, 1980.

UNIVERSITY OF MANITOBA. Department of Educational Administration and Foundations. The Department of Educational Administration and Foundations at the University of Manitoba may have a position in cross cultural studies available, commencing July 1 or September 1, 1980. This position is subject to budget approval. The appointment will be at the assistant or associate professor level and will be for a one year period, with the possibility of renewal. Duties will include undergraduate and graduate instruction; involvement in the field of activities of the department and research. Ph.D. is important. It is the policy of the University of Manitoba to give preference to those who are Canadian citizens or who are landed immigrants at the time of application unless other applicants have clearly superior qualifications. Both men and women are invited to apply. Send applications, a complete curriculum vitae and the names of three referees to: J.A. Riffel, Head, Department of Educational Administration and Foundations, University of Manitoba, Winnipeg, Canada, R3T 2N2.

UNIVERSITY OF MANITOBA. Department of Educational Administration and Foundations. The Department of Educational Administration and Foundations at the University of Manitoba may have a position in educational administration available, commencing July 1 or September 1, 1980. This position is subject to budget approval. The appointment will be at the assistant or associate professor level and will be for a one year period, with the possibility of renewal. Duties will include undergraduate and graduate instruction; involvement in the field of activities of the department and research. Ph.D. is important. It is the policy of the University of Manitoba to give preference to those who are Canadian citizens or who are landed immigrants at the time of application unless other applicants have clearly superior qualifications. Both men and women are invited to apply. Send applications, a complete curriculum vitae and the names of three referees to: J.A. Riffel, Head, Department of Educational Administration and Foundations, University of Manitoba, Winnipeg, Canada, R3T 2N2.

UNIVERSITY OF NEW BRUNSWICK. Faculty of Education. Faculty position. Home Economics Education. The University of New Brunswick invites applications for an academic position in Home Economics Education effective July 1, 1980. Responsibilities will include teaching courses in Child/Family Studies and Home Economics Education. Supervision of student teachers is included as well as leadership in professional development at both undergraduate and Master's levels. The candidate should have public school teaching experience and specialized training in human development and family studies. Master's degree necessary. Ph. D. preferred. Appointment subject to budget allocation. Please forward transcripts, curriculum vitae and the names of three references to: Dr.

D.R. LeBlanc, Chairman, Division of Vocational Education, Faculty of Education, University of New Brunswick, P.O. Box 4400, Fredericton, N.B. E3B 5A1.

UNIVERSITY OF NEW BRUNSWICK. Faculty of Education. Science Education. A faculty member is required at the level of Assistant or Associate Professor to teach primarily undergraduate but some graduate courses in Science Education. These courses are designed for students preparing to teach or teaching in both Elementary and Secondary schools. The appointment would be on a tenure track beginning July 1, 1980. Completed doctorate in Science Education would be preferred with some school experience. Salary and Benefits will be in accordance with regular U.N.B. scales which are presently under negotiation. Submit c.v. and the names of three referees to: Dr. Marian Small, Chairman, Division of Curriculum & Instruction, Faculty of Education, University of New Brunswick, P.O. Box 4400, Fredericton, N.B. E3B 5A1. The appointment is subject to budget allocation.

ONTARIO INSTITUTE FOR STUDIES IN EDUCATION. Department of History and Philosophy of Education. Applications are invited for a one-year position, possibly renewable, in History of Education starting July of September, 1980. Position is contingent upon approval of Board of Governors. Applicants must have a Ph.D., teaching experience and publications. Rank open. Academic background expected in social and/or intellectual history, with specialization in one or more of the following areas: history of women, labour history, politics or regionalism and underdevelopment, history of educational thought. Applications with curriculum vitae and names of three references should be sent to: Dr. Christopher Olsen, Chairman, Department of History and Philosophy of Education, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Ontario, M5S 1V6.

UNIVERSITY OF SASKATCHEWAN. College of Education. The College of Education invites applications for a full time position in Mathematics Education in the Department of Curriculum Studies. Qualifications: Doctorate or currently completing doctoral program; background and experience in: Mathematics Education — preferably at the Elementary level; Analysis of Teaching; and Clinical Supervision. Responsibilities: 1) Teach undergraduate and graduate courses in Mathematics Education, supervise interns, teach general methods courses, conduct micro-teaching labs and participate actively in curriculum development and in-service work within the province. 2) Advise graduate students. Rank and Salary: Assistant Professor. Commensurate with experience and qualifications. Employment date: July 1, 1980. Deadline: April 30, 1980. Apply to: Dr. J.L. Gajadharsingh, Head, Department of Curriculum Studies, College of Education, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0. Note: Position is subject to budgetary confirmation.

UNIVERSITY OF SASKATCHEWAN. College of Education. The College of Education invites applications for a Term Appointment (September 1, 1980 — June 30, 1981) available in Science Education in the Department of Curriculum Studies. Qualifications: Doctorate or currently completing doctoral program; background and experience in Science Education — preferably at the Elementary level. In addition, training and experience in Reading and/or French is desirable. Responsibilities: 1) Teach undergraduate courses in Science Education, supervise student teachers, and teach general methods courses. Rank and Salary: Assistant Professor, Commensurate with experience and qualifications. Employment Date: September 1, 1980. Deadline: April 30, 1980. Apply to: Dr. J.L. Gajadharsingh, Head, Department of Curriculum Studies, College of Education, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

SIMON FRASER UNIVERSITY. Faculty of Education. Music Education. Assistant Professor. Qualifications: Advanced academic preparation in music education. Experience in public school teaching involving extensive knowledge of current practice. Active interests in curriculum development and/or research on instruction applied to music. Teaching at graduate and undergraduate levels. Program development, research and publication. Appointment: Salary will be commensurate with qualifications and experience. The appointment, subject to final budget authorization, would be effective September 1, 1980. Application: Letters of application, together with curriculum vitae

and the names of three referees should be sent to Dr. George Ivany, Dean of Education, Simon Fraser University, Burnaby, B.C. V5A 1S6. Closing Date: Applications will be received until the position is filled.

YORK UNIVERSITY. Faculty of Education. 1. Assistant Professor in the Education of Exceptional Students (Special Education). 2. Doctorate in learning disabilities or a related field, a background of practical experience in education and a record of teaching excellence. University experience an asset. 3. Teaching and supervision in the undergraduate and graduate programs; teaching in the B.Ed. (Inservice) program which is conducted evenings, Saturdays and in the summer. 4. To be negotiated. 5. Send curriculum vitae and names of three referees to: Dr. Marilyn Dumaresq, Coordinator, EDEKS Program, Faculty of Education, York University, Downsview (Toronto), Ontario, M3J 1P3. 6. Effective date: September 1, 1990. 7. Closing date: May 1, 1990.

ENGINEERING

MCMMASTER UNIVERSITY. Department of Electrical and Computer Engineering. One tenurable position is available preferably at the Assistant Professor level but possibly at the Associate Professor level. Candidates must have a strong commitment to undergraduate and graduate teaching, and a good research record with the potential to pursue vigorous independent research. Preference will be given to candidates who demonstrated proficiency in hardware and/or software aspects of computer engineering and modern control systems. A Ph.D. and refereed publications are essential. Resumes, including the names and addresses of three referees should be addressed to Dr. D.P. Taylor, Chairman, Department of Electrical and Computer Engineering, McMaster University, Hamilton, Canada, L8S 4L7.

MCMMASTER UNIVERSITY. Engineering Physics Department. Solid State Electronics Position. The Engineering Physics Department at McMaster University has a vacancy in the solid-state electronics area. Preference will be shown to individuals with an orientation towards experimentation in solar and opto-electronic devices. An excellently equipped laboratory, contiguous to the Institute for Materials Research, is available for research and development. The appointment will be a contractual one for a two year period at the junior professorial level, starting July 1st, 1990. A resume, together with names of three referees, should be sent to Dr. J.S. Kirkaldy, Room 236 Senior Science Building, McMaster University, 1280 Main Street West, Hamilton, Ontario, Canada, L8S 4M1.

UNIVERSITY OF MANITOBA. Department of Geological Engineering. 1. Assistant Professor, consideration may be given to Associate Professor. 2. Ph.D. or equivalent with considerable research experience in the applications of rock mechanics to Geological and/or Geotechnical Engineering works. 3. Graduate and undergraduate teaching and research in Geotechnical/Rock Engineering. 4. Dependent on qualifications. 5. Head, Department of Geological Engineering, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. 6. September 1, 1990. Canadian citizens, landed immigrants, and others eligible for employment in Canada at the time of application are especially encouraged to apply. 7. When position filled.

ROYAL MILITARY COLLEGE OF CANADA. Department of Civil Engineering. 1. Academic positions for specialists in environmental engineering and in geotechnical engineering. 2. Ph.D. or equivalent desired, but a team appointment may be made to a candidate holding a Master's degree who is to teach their discipline to undergraduate and graduate civil engineering students; to conduct independent research in their discipline; to supervise undergraduate and graduate theses in their discipline; to teach civil engineering subjects other than those of their discipline as required by the Head of the Department. 4. Competitive. 5. Dr. J.S. Ellis, Department of Civil Engineering, Royal Military College, Kingston, Ontario, K7L 2W3. 6. Prior to September 1, 1990. 7. When positions are filled.

UNIVERSITY OF WINDSOR. Department of Industrial Engineering. Applications are invited for faculty positions in the areas of production systems and operations research. Duties include teaching at the

graduate and undergraduate levels, supervision of graduate students' research, pursuit of sponsored research and research and scholarship in Industrial Engineering. A Ph.D. in Industrial Engineering and a B.Sc. degree in Engineering are required. Prior industrial experience is desirable. Starting date is September 1, 1990 at the latest. Applicants should send their resume along with the names of three referees to Dr. A. Head, Head, Department of Industrial Engineering, University of Windsor, Windsor, Ontario, N9B 3P4. Telephone (519) 253-4232 ext. 310.

UNIVERSITY OF WINDSOR. Department of Engineering Materials (Metallurgy). Applications are invited for a tenure track appointment at the Assistant Professor rank (Associate Professor may be considered). Ph.D. required. Duties include teaching undergraduate and graduate courses and conducting research in one of the following areas: Physical-Chemical, Metallurgical Engineering/Science. Appointment effective July 1, 1990 or as soon as possible thereafter. Applications including curriculum vitae and the names of three referees, should be sent to Dr. W.V. Youdelis, Head, Department of Engineering Materials, University of Windsor, Windsor, Ontario, N9B 3P4.

UNIVERSITY OF WINDSOR. Department of Civil Engineering. Applications are invited for one tenure track and one sessional appointment at the Assistant Professor rank (Associate Professor may be considered). Ph.D. or equivalent experience required. Duties include teaching undergraduate and graduate courses and conducting research in one of the following areas: sanitary/water resources; structures; transportation; soils/foundations. Appointment effective July 1, 1990 or as soon as possible thereafter. Applications, including curriculum vitae and the names of three referees, should be sent to Dr. G.R. Monfort, Head, Department of Civil Engineering, University of Windsor, Windsor, Ontario, N9B 3P4. Canadian citizens and landed immigrants are especially invited to apply.

UNIVERSITY OF SASKATCHEWAN. College of Engineering. Position: Research Associate. Period of Employment: September 1, 1990 for a period of not less than one year and not exceeding two years. Duties: To carry out full time research in the area of Non-Linear and Optimal Control Systems. Qualifications: A minimum of a Ph.D. and a number of years of relevant experience. Salary: Equivalent to Assistant Professor. Contact Person: Dr. P.N. Nikiforuk, Dean of Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

UNIVERSITY OF OTTAWA. Engineering Management Program — Faculty of Science and Engineering. The Faculty of Science and Engineering invites applications for appointment in a recently introduced Engineering Management Program. This will be a tenure track position with potential to a rank that will be commensurate with the qualifications of the candidate. Duties will include teaching and research, and active involvement in the further development of the program. Candidates should hold a doctoral degree, preferably in industrial engineering. Industrial experience will be considered as a significant advantage. Bilingualism (French and English) would be an asset. Applications including curriculum vitae, details of experience and names of referees should be addressed to Dr. A.S. Krausz, Chairman, Department of Mechanical Engineering, University of Ottawa, Ottawa, Ontario, K1N 6N5.

ENGINEERING-CHEMICAL

UNIVERSITY OF WINDSOR. Department of Chemical Engineering. Applications are invited for one tenure track appointment beginning July 1, 1990 in the Department of Chemical Engineering at the University of Windsor. Rank and salary are open depending on the qualifications of the individual. Applicants should have a strong commitment to excellence in teaching at the undergraduate and graduate levels with interests in the area of Process Dynamics and Control. In addition to teaching, the appointee will be expected to develop his/her research program consistent with Departmental goals. A doctorate in Chemical Engineering is required. Industrial experience is desirable but not essential. All well qualified candidates will be considered, but Canadian citizens and landed immigrants

will receive preference. A curriculum vitae, a statement of research and teaching interests and the names of three referees (including the Ph.D. supervisor, if completed) should be submitted to: Dr. A.W. Gnyo, Department of Chemical Engineering, University of Windsor, Windsor, Ontario, Canada, N9B 3P4.

MCGILL UNIVERSITY. Department of Chemical Engineering. Applications are invited for a tenure track appointment as Assistant or Associate Professor. The appointee will be expected to develop a vigorous research program in a department which has a high level of research activity. As there are several alternatives as to areas of specialization to strengthen through this appointment, the research area for this appointment is not specified. Salary and rank commensurate with qualifications. Appointment open until filled. Send resume, names of three referees, and statement of teaching and research interests to Dr. W.J.M. Douglas, Chairman, Department of Chemical Engineering, 3480 University Street, Montreal, Quebec, H3A 2A7.

UNIVERSITY OF SASKATCHEWAN. Department of Chemistry and Chemical Engineering. Applications are invited from qualified candidates for appointment as Postdoctoral Fellows and Research Associates in the following fields of chemistry and chemical engineering: Quantum chemical calculations on conformational changes and chemical reactions; photochemistry and radiation chemistry of transitional metal complexes; laser photochemistry, photophysics and spectroscopy; organometallic chemistry and organometallic reaction mechanisms; electron spin resonance studies of silicates and radicals, chemical reactions generated by ultrasound, dynamics of fast reactions using ultrasonic techniques, corrosion engineering, catalysis, production of liquid and gaseous fuels from coal. These positions are tenable initially for one year, renewable, at rates up to the maximum allowed by the NSERC grant regulations. Send curriculum vitae, transcripts and letters from three referees to the undersigned, from whom further particulars may be obtained. Engineering A.R. Knight, Chairman, Department of Chemistry and Chemical Engineering, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0. Canada. Telephone 306-343-2933.

ENGINEERING-ELECTRICAL

UNIVERSITY OF WINDSOR. Department of Electrical Engineering. Applications for both a tenure track and temporary positions starting July 1, 1990 are invited in the Department of Electrical Engineering. A Ph.D. in Electrical Engineering and a clear potential for distinguished performance in teaching and research are required. Successful applicants will be expected to teach undergraduate and graduate courses and conduct research in one or more of the following areas: System and Control Theory, Digital Electronics and Microprocessors, Digital Signal Processing, Computer-Aided Design, Field Calculation Methods, High Voltage Engineering, Power Systems and Energy Conversion Devices. Applications should be sent to Dr. A.H. Oureshi, Head, Department of Electrical Engineering, University of Windsor, Windsor, Ontario, N9B 3P4. Applications will be accepted until the positions are filled.

UNIVERSITY OF NEW BRUNSWICK. Department of Electrical Engineering. The Department of Electrical Engineering at the University of New Brunswick requires an Assistant Professor or an Associate Professor with a background in small computers and digital systems. The successful candidate will be expected to teach undergraduate and graduate courses in the above areas. The appointee would be expected to supervise graduate students and should be willing to engage in grant and contract research, which need not be in the areas specified above. An appointment would commence as early as possible after July 30, 1990. Letters of application together with curriculum vitae, the names and addresses of three referees, and a statement of research interests should be sent to: Dr. E.F. Hill, Chairman, Electrical Engineering Department, University of New Brunswick, P.O. Box 4400, Fredericton, N.B. Canada, E3B 5A3.

CONCORDIA UNIVERSITY. Department of Electrical Engineering. Faculty Position. Applications are invited for a tenure-track faculty position in the Department of Elec-

trical Engineering at Concordia University. The position will involve undergraduate and graduate teaching in the area of Controls and Systems, and research in Control Theory with applications in Power Systems or Communication Systems or Digital Systems. The rank of appointment is open. Applicants should hold a doctorate in an appropriate area and be familiar with modern trends in their area. Industrial experience will be considered an asset. Applications, which should include curriculum vitae and the names of three referees, should be addressed to: Dr. A. Antoniou, Chairman, Dept. of Electrical Engineering, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Quebec, H3G 1M8, Canada.

MCGILL UNIVERSITY. Department of Electrical Engineering. The Department of Electrical Engineering seeks applicants for a tenure-track position at the level of Assistant Professor. Candidates should have a Ph.D. and research interests in communications or computer systems. The teaching duties include participation in the organization and teaching of undergraduate laboratories in communication or computer electronics. Send resumes to: Professor P.R. Bélanger, Chairman, Department of Electrical Engineering, McGill University, 3480 University Street, Montreal, Quebec, H3A 2A7.

UNIVERSITY OF WATERLOO. Department of Electrical Engineering. Applications are invited for two positions at the Assistant Professor level, one probationary in a tenure-stream and one definite term, in the areas of Computers and Microwaves/Antennas. Applicants must hold a doctorate and have a strong commitment to both undergraduate and graduate teaching and research. Industrial experience would be considered an asset and a demonstrated aptitude for research is essential. An appointment for September 1990 is anticipated. At a salary commensurate with qualifications and experience. A detailed resume, a statement of teaching and research interests and the names of three referees should be sent to: Chairman, Department of Electrical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G1, Canada. First consideration will be given to those applicants who are legally eligible to work in Canada at the time of application. Subject to the availability of funds.

ENGINEERING-MECHANICAL

UNIVERSITY OF WINDSOR. Department of Mechanical Engineering. Applications are invited for tenure track and sessional appointments in the Department of Mechanical Engineering at the Assistant and Associate Professor rank or equivalent experience is required. Successful applicants will be expected to teach undergraduate and graduate courses as well as conduct research in one of the following areas: thermo-fluids, energy conservation, design and control of machine elements, sound and vibration control. Appointment effective July 1, 1990 or as soon as possible thereafter. Applications, including curriculum vitae and the names of three referees should be sent to Dr. T.W. McDonald, Head, Mechanical Engineering Department, University of Windsor, Windsor, Ontario, N9B 3P4.

NOVA SCOTIA TECHNICAL COLLEGE. Department of Mechanical Engineering. The Department of Mechanical Engineering at the Nova Scotia Technical College invites applications for two faculty positions in the areas of Heat Transfer/Fluid Mechanics and Machine Design. Applicants should possess a doctorate in mechanical engineering. Responsibilities include undergraduate and graduate teaching and research. Applicants should send curriculum vitae and names of at least three referees to: Dr. J.L. Warner, Head, Department of Mechanical Engineering, Nova Scotia Technical College, P.O. Box 1000, Halifax, Nova Scotia, B3J 2X4.

CONCORDIA UNIVERSITY. Department of Mechanical Engineering. The Department of Mechanical Engineering at Concordia University is seeking applications for full-time faculty positions at the Assistant Professor rank to start June 1990 or soon thereafter. The Department offers B.Eng., M.Eng. and Ph.D. programs and has a well established faculty research activity. Candidates should have a Ph.D. with proven ability to conduct significant independent research and a high promise of excellence in teaching. Preference will be given to

those who can teach a range of courses including laboratory supervision in the area of mechanics, mechanical design and drafting, manufacturing and production. The successful applicant will be expected to seek outside funding for research projects, demonstrate scholarly productivity through publications in journals and develop fruitful contacts with local industries. Salary range (1978-79) \$19,853-\$25,610. Applications including detailed curriculum vitae with names of three referees should be sent to Dr. T.S. Sankar, Chairman, Department of Mechanical Engineering, H239, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Quebec, H3G 1M8.

UNIVERSITY OF WATERLOO. Department of Mechanical Engineering. 1. Assistant Professor. Tenure track position. Initial appointment will be for three years. 2. A recent Ph.D. graduate with experience in digital and analog control of mechanical systems. 3. Teaching responsibilities will be primarily at the undergraduate and graduate level in control and automation. The successful applicant will be expected to contribute to the department's research in this area. He will interact with faculty who have ongoing projects in this and related areas such as fluid power, machinery diagnostics and noise control. 4. Salary will be commensurate with experience and qualifications. 5. A detailed curriculum vitae, a statement of teaching and research interests and the names of three referees should be sent to Dr. D.J. Burns, Chairman, Department of Mechanical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G1. 6. September 1, 1980 preferred. 7. No closing date for receipt of applications. (Subject to the availability of funds.) First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by this position.

ENGLISH

SIMON FRASER UNIVERSITY. Department of English. The Department of English is seeking to make two appointments in the field of Composition beginning September 1, 1980. These will be at the rank of lecturer, a two-year renewable appointment at a starting salary of around \$20,000. Minimum requirements: M.A. and some teaching experience. Please send c.v. and the names of three referees to Peter Buitenhuis, Chairman, Department of English, Simon Fraser University, Burnaby, B.C. V5A 1S6. Closing date for applications is one month from the date of publication of this advertisement.

CARLETON UNIVERSITY. English Language Program. Applications are invited for a limited term appointment as an Instructor in the English as a Second Language program. Applicants should have a M.A. in a discipline related to ESL and experience in teaching and material development in ESL for academic and/or professional students. Teaching duties will be in the intensive ESL program and the instructor will be expected to participate in the unit's program of material development. The salary minimum for instructors for 1980-81 is \$13,710. Applicants should send curriculum vitae, including the names of three referees, to Professor C.S. Jones, Director, English Language Program, Carleton University, Ottawa, Ontario, K1S 5S6. Effective date of appointment will be September 1980.

UNIVERSITY OF REGINA, CAMPION COLLEGE. Department of English. Applications are invited for a two year term position at the level of assistant professor beginning July 1, 1980. The 1979-80 salary floor for this rank was \$18,829. Ph.D. with teaching experience is desirable, and preference will be given to candidates in eighteenth century literature or Victorian poetry. Applications will be accepted until the position is filled. They should include curriculum vitae and the names of three referees and should be sent to Prof. Vernon McCarthy, Chairman, Department of English, Campion College, University of Regina, Regina, Saskatchewan, S4S 0A2.

UNIVERSITY OF GUELPH. Department of English. 1. Two lecturers for two full-time nine-month appointments. 2. To teach freshman courses combining literature and writing instruction. 3. Salary base: \$14,000. 4. Reply, including names of two referees and curriculum vitae, to Dr. A.E. Austin, Acting Chairman, Department of English, University of Guelph, Guelph, Ontario, N1G 2W1. 5. Effective date of appointment: 1 September 1980 to 30 April 1981. 6. Closing

date: 30 April 1980.

THE UNIVERSITY OF NEW BRUNSWICK. Department of English. Seasonal lecturer to teach introductory courses; 1980-81 term. Appointment contingent on the availability of funds. Ph.D. required. Send letter of applications, names of referees, and c.v. to Professor Robert Cockburn, Chairman, Department of English, The University of New Brunswick, P.O. Box 4400, Fredericton, N.B., E3B 5A3, by April 30, 1980, or until the position is filled.

ROYAL MILITARY COLLEGE OF CANADA. Department of English. 1. Assistant Professor. 2. Ph.D. degree already awarded. Preference will be given to candidates with qualifications in Victorian literature and with an active interest in Canadian literature. 3. To teach undergraduate courses at first-year level and Honours English courses appropriate to experience. 4. Salary commensurate with qualifications and experience. 5. Applications, including a curriculum vitae and the names and addresses of three referees, should be sent to: Dr. M.A. Mason, Head, Department of English, The Royal Military College of Canada, Kingston, Ontario, K7L 2W3. 6. 1 September, 1980. 7. Closing date for applications: 30 April, 1980. 8. Open to men and women. (Clearance No 409 257 and other).

SIMON FRASER UNIVERSITY. Department of English. The department is expecting to make two visiting Assistant Professor appointments for two semesters, Fall 1980 and Spring 1981. Areas: 1) American Literature; 2) Shakespeare and other dramatic literature. Salaries in the range of \$17,000. Send applications with the names of three referees to Peter Buitenhuis, Chairman, Department of English, Simon Fraser University, Burnaby, B.C. V5A 1S6. Closing date for applications is April 30, 1980.

SIMON FRASER UNIVERSITY. Department of English. The department expects to make a visiting appointment for two terms, Fall 1980 and Spring 1981 in the field of Composition and Rhetoric. The appointee will be expected to teach courses in the field and to advise the department on curriculum development. Salary commensurate with experience, up to \$27,000. Send curriculum vitae and the names of three referees to Peter Buitenhuis, Chairman, Department of English, Simon Fraser University, Burnaby, B.C. V5A 1S6. Closing date is May 1, 1980.

ACADIA UNIVERSITY. Department of English. Applications are invited for the following vacancies, subject to budgetary approval: 1. Two, or possibly three, seasonal appointments for the period August 1980-May 1981. All areas of specialization will be considered. Salaries approximately \$13,000 (without Ph.D.); \$15,000 (with Ph.D.). 2. One renewable part-time appointment to teach one course in children's literature. Salary negotiable, depending upon the applicant's qualifications. 3. One appointment to teach Canadian literature during summer school, 1 July-15 August 1980. Salary still to be negotiated, but not less than \$2,500. Deadline for application 10 April or until appointments filled. Applicants should forward a letter of application, a curriculum vitae, and a transcript of academic record. They should ask three appropriate persons to forward confidential letters of reference to: Dr. Raymond H. Thompson, Head, Department of English, Acadia University, Wolfville, Nova Scotia, B0P 1X0.

UNIVERSITY OF NEW BRUNSWICK. (Saint John Campus). Division of Humanities and Languages. English. Applications are invited for a possible position (subject to funding) in English, teaching undergraduate courses in Modern American Literature (preferably including Science Fiction) and British Literature prior to 1800. The current floor for Assistant Professor (under negotiation) is \$15,597. Applications, including a curriculum vitae, transcripts and three letters of reference should be sent by 30 May 1980 to: Dr. Winnifred Bogards, Chairman, Division of Humanities and Languages, Saint John Campus, University of New Brunswick, P.O. Box 5050, Saint John, N.B., E2L 4L5.

ENVIRONMENTAL STUDIES

TRENT UNIVERSITY. Environmental and Resource Studies Program. Applications are invited for the position of lecturer or Assistant Professor in Environmental Studies. Candidate should possess or be near Ph.D. in Biology (or possibly Forestry or Agriculture) with some practical experience with Environmental Impact Statements. The candidate should be

capable of teaching course in environmental methods and a senior course in own specialty. The salary is negotiable and dependent upon rank. Applications including c.v., transcripts and list of three referees should be sent to Dr. Robert Page, Chairman, Environmental and Resource Studies Program, Trent University, Peterborough, Ontario, K9J 7B8. As soon as possible. Appointment will commence 1 July 1980 and will be tenure stream.

EXTENSION-INTERSESSION AND SUMMER SESSION

UNIVERSITY OF SASKATCHEWAN. Division of Extension and Community Relations. Summer Session 1980 (July 3-August 15). Sessional lecturers are required for summer teaching positions for the following courses: Art Education, Biogeography, Organic Chemistry, Comparative Educational Administration. Applications should be submitted to The Coordinator of Summer Sessions, Division of Extension and Community Relations, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

UNIVERSITY OF SASKATCHEWAN. Division of Extension and Community Relations. Intercession 1980 (May 12-June 21). A sessional lecturer is required for the following half-courses: Analytical Chemistry - Quantitative Analysis, Inorganic Chemistry. Applications should be submitted to The Coordinator of Summer Sessions, Division of Extension and Community Relations, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

FOOD SCIENCE

MCGILL UNIVERSITY. School of Food Science. Consumer Studies. Faculty position available September 1, 1980 or earlier in consumer studies. Responsibilities include teaching and providing leadership in the undergraduate Consumer Services major. Master's or Ph.D. degree. Applications will be received until the position is filled. Salary commensurate with experience. Applicants should send c.v., transcripts and names of three referees to: Dr. Shirley M. Weber, Director, School of Food Science, Macdonald Campus of McGill University, Ste-Anne-de-Bellevue, Quebec, H9X 1C0.

GENETICS

MCGILL UNIVERSITY. Centre for Human Genetics. The Centre for Human Genetics, McGill University is seeking a human/medical geneticist with a strong investigative interest in mathematical/population genetics. Apply to L. Pinsky, M.D., Director, Centre for Human Genetics, McGill University, 1205 avenue Docteur Penfield, Montreal, Quebec, Canada, H3A 1B1, deadline for receipt of applications is October 1, 1980.

GEOGRAPHY

BROCK UNIVERSITY. Department of Geography. Applications are invited for a seasonal appointment (September 1980 through May 1981) at the Lecturer Level. Duties include teaching undergraduate courses in Geomorphology and an introductory course in Quantitative Techniques. Ph.D. or near Ph.D. in related field preferred. Applications, with curriculum vitae and the names of three referees should be sent to: Dr. W. Thomson, Chairman, Department of Geography, Brock University, St. Catharines, Ontario, L2S 3A1.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Sir Wilfred Grenfell College. Department of Geography. 1. Undergraduate teaching position. 2. The College offers a complete range of courses at the first- and second-year university level. Major responsibilities would include teaching Introductory Geography courses and second-year Physical Geography courses. 3. Ph.D. in Geography preferred. 4. Salary and rank dependent upon qualifications and experience. 5. Curriculum vitae and names of three referees to: Mr. E.J. Hodgett, Vice-Principal, Memorial University

of Newfoundland, SIR WILFRED GRENFELL COLLEGE, University Drive, Corner Brook, Newfoundland, A2H 6P9. 6. September 1, 1980.

WILFRID LAURIER UNIVERSITY. Department of Geography. 1. Lecturer or Assistant Professor for a limited appointment of one year beginning July 1, 1980. 2. Ph.D. or late dissertation stage. Preference will be given to applicants who are eligible for employment in Canada at the time of application. 3. To teach graduate and undergraduate courses in Resources Management. The ability to teach quantitative techniques would be an asset. 4. Salary commensurate with rank and experience. 5. Vitae and names of three referees to: Dr. R.W. Muncaster, Chairman, Department of Geography, Wilfrid Laurier University, Waterloo, Ontario, N2L 3C5.

YORK UNIVERSITY. Department of Geography, Canada, Toronto, Ontario, York University. Assistant Professor. Contractually limited appointment for one or possibly two years beginning Fall 1980, subject to budgetary approval. Ph.D. required. Physical geographer with primary interest in climatology. Send vitae and names of three referees. Apply James R. Sibson, Chairman, Department of Geography, York University, 4700 Keele Street, Downsview, Ontario, Canada M3J 1P3.

GEOLOGY

UNIVERSITY OF TORONTO. Department of Geology. Applications are invited for an assistant professor position beginning July 1st, 1980. This is a limited term appointment of up to four years. We are particularly interested in candidates with strong backgrounds in fields such as geotectonics, crustal geophysics or planetary science. In addition applicants must be able to teach undergraduate courses in plate tectonics and planetary science and conduct research in related fields. Please send a curriculum vitae and the names of three referees to: The Chairman, Department of Geology, University of Toronto, Toronto, Ontario, M5S 1A1, Canada.

UNIVERSITY OF TORONTO. SCARBOROUGH COLLEGE. Physical Sciences Division. Geologist - Fluids. Applications are invited for a position starting July 1980 at the Assistant Professor rank. Contract is for 3 years and is renewable. Candidates should have a Ph.D. in an aspect of fluid behaviour in geological systems with a solid background in the physical sciences; in particular, expertise in at least one of the following areas is required: mathematical modelling, fluid flow in porous media, aqueous chemistry. The successful candidate will be expected to develop an active research and teaching programme in this subject area and to contribute to existing research programmes related to natural fluid systems, particularly in Quaternary geology, modelling of hydrologic systems, environmental geochemistry, isotope geology, and ore genesis. The position is subject to availability of funds. Please send c.v. and names of three referees to: Prof. J.E. Dove, Chairman, Physical Sciences Division, Scarborough College, University of Toronto, West Hill, Ontario, M1C 1A4.

UNIVERSITY OF TORONTO. Department of Geology. The Department of Geology expects to be able to hire post-doctoral fellows or research associates in some of the following fields commencing April, 1980. If interested, please submit c.v. and the names of three referees to: Chairman, Department of Geology, University of Toronto, Toronto, Ontario, M5S 1A1. Analytical atomic spectroscopy, geochemistry of Archean rocks, petrographic and petrological, field based analytical studies of igneous and metamorphic petrology, paleomagnetism with emphasis on ore deposits, on Archean rocks or on meteorites, electrical properties of rocks and minerals, geology and geochemistry of ore deposits, pore fluid geochemistry, emphasis on ores or hydrocarbons, structural geology, C-14, C-13, Be-10 and other sensitive analyses with the nuclear physics method of tandem accelerators.

HEALTH CARE

UNIVERSITY OF BRITISH COLUMBIA. Department of Health Care and Epidemiology. The Department of Health Care and Epidemiology is seeking a person

at the doctorate level (Ph.D.) with experience in social research methods, and the ability to apply epidemiological techniques to health planning problems. The successful applicant will be closely associated in teaching and administration of a program leading to an M.Sc. in Health Services Planning and other graduate level teaching. This program accepts only experienced graduates. The Department also has teaching responsibilities at the undergraduate (medical) and residency levels. Opportunities for research and consulting are good, and the Department enjoys a close relationship with government and community agencies. Salary negotiated on the basis of experience and qualifications. In conformity with the policy of the University of British Columbia, this position is open to qualified candidates of either sex. Applications to be directed to Dr. C.J.G. Mackenzie, Acting Head, Department of Health Care and Epidemiology, University of British Columbia, 2075 Wesbrook Mall, Vancouver, B.C., V6T 1W5.

HISTORY

ROYAL MILITARY COLLEGE OF CANADA. Department of History. 1. Assistant Professor. 2. Ph.D. already awarded, Sessional Appointment. 1 September 1980 - 31 August, 1981. 3. To teach courses in the Far East and World Diplomacy. Since 1945 at the 3rd and 4th year level. 4. Salary commensurate with qualifications and experience. 5. Applications, including curriculum vitae, and names and addresses of referees to be sent to Dr. Frederic F. Thompson, Head, Department of History, The Royal Military College of Canada, Kingston, Ontario, K7L 2W3. 6. 1 September 1980. 7. Closing date for applications April 30, 1980. 8. Open to both men and women. (Clearance Number 409-267-906).

ACADIA UNIVERSITY. Department of History. Applications are invited for two positions (subject to availability of funds) as sabbatical replacements for 1980-81. Ph.D. preferred. Rank level: Lecturer or Assistant Professor according to qualifications. Salary open. Competence in three of the following areas is required: 1) Survey of European history; 2) Europe in the 19th and 20th centuries; 3) Upper level course Europe 1919-1939; 4) U.S. to 1865; 5) History of the Maritime Provinces; 6) Comparative Colonial Societies (New England, Virginia, and Acadia-Nova Scotia); 7) end of War for American Independence; 8) History of Women. Address applications to Dr. Lois Vallety-Fischer, Department of History, Acadia University, Wolfville, Nova Scotia, B0P 1X0. Effective date of appointment August 1, 1980. Applications will be accepted until April 30, 1980.

BRDCK UNIVERSITY. Department of History. The Department of History invites applications for the position of sessional lecturer. This is a one year appointment with the possibility of renewal for a second year. Candidates with the doctoral degree and teaching experience in the field are preferred. Duties will include undergraduate teaching in a general course in post-Revolutionary United States history and an upper-level course in United States political history. Salary will be dependent upon qualifications and experience and the appointment will be effective 1 July 1980. Candidates should submit a letter of application, vitae, undergraduate and graduate transcripts and the names of three referees to Prof. D.J. Goodspeed, Chairman, Department of History, Brock University, St. Catharines, Ontario, L2S 3A1.

CONCORDIA UNIVERSITY. Department of History. Visiting History Professor. Field: Modern European History. Rank: Visiting Professor. Salary: \$35,000 Can. for a 9-month period, September through May, 1980-81. Responsibilities: Teaching the equivalent of a 3-course load in the Department of History and the Liberal Arts College. Qualifications: Solid Teaching experience and an excellent record of scholarship. Send curriculum vitae and any supporting documents to: S.J. Scheinberg, Chairman, Department of History, Concordia University, 1455 de Maisonneuve Blvd. W., Montreal, Quebec, H3G 1M8, Canada.

MOUNT SAINT VINCENT UNIVERSITY. History Department. 1. Assistant or associate professor for two year leave replacement. 2. Ph.D. Teaching experience and publications. 3. Undergraduate teaching with specialization in Canadian social history and women's history, with interest in European social history. 4. Salary depending on qualifications and experience

(minimum 1979, Assistant \$16,700 - Associate \$22,300). Send application including curriculum vitae and names of three referees to: 5. Dean of Humanities and Sciences, Mount Saint Vincent University, 166 Bedford Highway, Halifax, Nova Scotia, B3M 2J6. 6. July 1, 1980. 7. Applications will be accepted until position is filled.

UNIVERSITY OF NEW BRUNSWICK. Division of Humanities and Languages, History Position. University of New Brunswick at Saint John, N.B. Applications are invited for a tenure track, July 1, 1980 appointment at the Assistant Professor level. Applicants should be capable of teaching undergraduate British and European early modern political and social history. Ph.D. and teaching experience preferred. Salary negotiable; appointment subject to approved funding; applications by April 30, 1980 should be sent to: Dr. W. Bogardus, Chairman, Division of Humanities and Languages, University of New Brunswick at Saint John, New Brunswick, E2L 4L5.

UNIVERSITY OF PRINCE EDWARD ISLAND. Department of History. Applications are invited at the Assistant or Associate Professor level for a one-year appointment for Professor on Sabbatical. Appointment subject to budgetary approval. Ph.D. and teaching experience. Undergraduate courses in Russian, Modern European and Medieval European history. Salary to commensurate with qualifications and experience. Send vitae, three letters of reference and copies of graduate transcripts to Professor Andrew Robb, Chairman, Department of History, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3. Position effective July 1, 1980. Closing date for applications April 30, 1980.

UNIVERSITY OF PRINCE EDWARD ISLAND. Department of History. Applications are invited at the Lecturer or Assistant Professor level for a one-year term appointment in Canadian History. Appointment subject to budgetary approval. Ph.D. or equivalent preferred. Teaching undergraduate course in Canadian Social History; European survey and Introductory Canadian survey. Salary commensurate with experience and qualifications. Send vitae, three letters of reference and copies of graduate transcripts to Professor Andrew Robb, Chairman, Department of History, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3. Position effective July 1, 1980. Closing date for applications when position is filled.

HOME ECONOMICS

THE UNIVERSITY OF ALBERTA. Faculty of Home Economics. Academic Rank: Visiting Assistant Professor. 2. Degree: Ph.D. preferred. Master's with experience in teaching and research. 3. Job Description: teaching consumer studies and management courses, supervision of graduate students. 4. Current salaries: 1979-80 - Assistant Professor, \$22,636 maximum. 5. Training and experience: 6. Position available: July 1st, 1980 for a period of 3 years while regular faculty member is on leave. 7. Deadline for applications: until position filled. 8. Write to: Dianne K. Kieren, Ph.D., Chairperson, Family Studies Division, 801 General Services Building, Faculty of Home Economics, University of Alberta, Edmonton, Alberta, T6G 2M8. The University of Alberta is an equal opportunities employer.

HUMANITIES

YORK UNIVERSITY. Division of Humanities: Caribbean Appointment. The Division of Humanities at York University invites applications for a contractually-limited appointment, for up to three years, in the area of English-speaking Caribbean cultural history. The appointment is effective July 1, 1980. Preference will be given to applicants who are eligible for employment in Canada at the time of application. Candidates will be expected to participate in York's interdisciplinary teaching and research programmes in Caribbean and Latin American studies, and to have teaching interests and experience in general areas of the Humanities. Ph.D. or equivalent. Application including curriculum vitae and names of three referees to Professor Michael Brown, Chairman of Recruiting Committee, Humanities Division, Winters 225, York University, Downsview, Ontario, M3J 1P3.

Reply by: April 30, 1980.

INTERIOR DESIGN

UNIVERSITY OF MANITOBA. Department of Interior Design. Applications are invited for anticipated positions as lecturer or assistant professor starting September 1, 1980. Salary and rank commensurate with qualifications and experience. Undergraduate teaching in two of drafting, building structures and renovations, colour, graphic presentation, and history of art and interior design. Canadian citizens, landed immigrants, and others eligible for employment in Canada at the time of application are especially encouraged to apply. Forward current vitae and names of three referees to: Dr. G.R. Fuller, Head, Department of Interior Design, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

JOURNALISM

CARLETON UNIVERSITY. School of Journalism. Assistant or Associate Professor. Candidates must have Ph.D. or equivalent in mass communications or related discipline; experience as a working journalist desirable. Duties will involve the teaching of undergraduate courses in mass communication and journalism studies. Salary is negotiable. This will be a tenure track appointment commencing July 1, 1980. Inquiries should be addressed to: G.S. Adam, Director, School of Journalism, Carleton University, Ottawa, Canada, K1S 5B6. Closing date for receipt of applications: April 30, 1980.

LANGUAGES/LITERATURE/LINGUISTICS

BRDCK UNIVERSITY. Department of Germanic & Slavic Studies. Applications are invited for a post as sessional lecturer in Germanic & Slavic Studies. Duties: to teach undergraduate language and literature courses. Please send curriculum vitae and the names of three referees to: Dr. John Michelsen, Chairman, Department of Germanic & Slavic Studies, Brock University, St. Catharines, Ontario, L2S 3A1.

DALHOUSIE UNIVERSITY. Department of French. The Department of French may have positions available in 1980-81 for specialists in the following areas: French language instruction, applied linguistics, methodology, FL education and pedagogy. There is also a possibility that we might hire someone qualified to teach in one or a combination of the following: 16th century French literature, women's studies, cinema. Interested candidates should write, sending curriculum vitae, to: Dr. Michael Bishop, Acting Chairman, Department of French, Dalhousie University, Halifax, Nova Scotia, B3H 3J5, Canada.

DALHOUSIE UNIVERSITY. German Department. 1. Assistant Professor. 2. Ph.D. - Background in the history of ideas, esp. ancient and/or medieval thought. 3. Instruction and administration of language courses, lit. and thought. 4. According to scale. 5. Chairman, Dept. of German, Dalhousie University, Halifax, N.S., B3H 3J5. 6. Position subject to budgetary approval. July 1, 1980. 7. April 30, 1980.

UNIVERSITY OF GUELPH. Department of Languages and Literatures. Co-ordinator French Language Learning Unit (three year contract) (subject to final budgetary approval) to teach French as a second language level. Co-ordinate French Language Learning Unit. Provide guidance in the area of language teaching. Ph.D. in Applied Linguistics desirable. Experience in language teaching. Salary dependent upon qualifications and experience. First consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by this position. Send applications to Dr. Margaret Andersen, Chairman, Department of Languages and Literatures, University of Guelph, Guelph, Ontario, N1G 2W1.

UNIVERSITY OF NEW BRUNSWICK. Department of Romance Languages - French. 1. Lecturer/Assistant Professor. 2. 2 year appointment with possibility of renewal. 2. Ph.D. preferred in the field of applied linguistics and/or language didactics. Native or near native command of the language. Experience in second language teaching. 3. Teaching undergraduate courses in language improvement and planning programmes. 4. Salary dependent on qualifications and experience. UNB is presently negotiating its first collective agreement. 5. Send full curriculum vitae and names of three referees to: Professor R. Whalen, Chairman, Department of Romance Languages, P.D. Box 4400, University of New Brunswick, Fredericton, N.B. E3B 5A3. 6. Appointment beginning July 1, 1980. 7. Closing date: when appointment is made.

ST. FRANCIS XAVIER UNIVERSITY. Department of Modern Languages. Applications are invited for a position in the Department of Modern Languages. Dualistications Required: Doctorate in French, experience in university teaching. Ability to teach basic Spanish an asset. Nature of Duties: teaching French language and literature at the undergraduate level. Salary and Rank: Negotiable according to qualifications and experience. Effective Date of Appointment: September 1, 1980. Applications should be forwarded to Mrs. G. Sanderson, Chairman, Department of Modern Languages, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 1C0.

UNIVERSITY OF ALBERTA. Department of Comparative Literature. One-term visiting professorship in Comparative Literature (Jan.-Apr. 1981); specialization in European literatures 17th to 20th C. Thematics and Rhetoric. Ph.D., distinguished publication record and ability to teach in English and French essential. Salary commensurate with qualifications and workload. Applications to Professor E.D. Blodgett, Chairman, Department of Comparative Literature, The University of Alberta, Edmonton, Alberta, T6G 2E6, and will be accepted until position is filled. The University of Alberta is an equal opportunity employer.

UNIVERSITY OF CALGARY. Department of Linguistics. The Department of Linguistics at The University of Calgary is inviting applications for one full-time limited term and one sessional appointment. Salary commensurate with qualifications and experience. Ph.D. with publications and specialization in either phonology or applied linguistics are desired; demonstrated teaching ability in undergraduate courses is required. Positions commence July 1 and September 1, 1980, and will be of one or two-year duration depending upon qualifications. Applications consisting of a curriculum vitae and three letters of reference to E.D. Cook, Head, Department of Linguistics, The University of Calgary, 2920 24th Avenue N.W., Calgary, Alberta, T2N 1N4.

CARLETON UNIVERSITY. Department of Linguistics. The Marston LaFrance Fellowship, a one-year post-doctoral teaching fellowship, is available for 1980-81 in the Department of Linguistics at Carleton University, Ottawa. Duties will include teaching undergraduate courses in phonetics, phonology, structures of English, and introductory linguistics, with the possibility of participating in departmental research programs in applied linguistics. A strong background in applied linguistics or ESL theory is desirable. Salary: \$18,200. Closing date for applications: June 15, or when filled. Applicants should submit a complete curriculum vitae and names of three referees to: Ian Pringle, Chairman, Department of Linguistics, Carleton University, Ottawa, Ontario, K1S 5B6.

UNIVERSITY OF TORONTO. Department of Spanish and Portuguese. Title of position: Assistant professor of Portuguese for a one-year contract (possibly renewable to a total of four years). Qualifications required: Ph.D. or equivalent with a thesis in modern Brazilian literature. Experience in language and literature teaching and a strong commitment to research essential. Native or near-native fluency preferred. Nature of duties: Undergraduate teaching of language

end literature courses. Salary: Commensurate with qualifications and experience. Enquiries should be sent to: Professor K.L. Levy, Department of Spanish and Portuguese, University of Toronto, Toronto, Ontario, M5S 1A1. Effective date of appointment: July 1, 1980. Closing date for applications: April 30, 1980.

UNIVERSITY OF TORONTO, ERINDALE COLLEGE. Department of French. Applications are invited for a one-year appointment at the level of lecturer or assistant professor. Qualifications: Ph.D., with experience as a language teacher, specialist in Enlightenment literature. Duties: to teach undergraduate language practice and possibly one literature course. Salary and rank to be based on qualifications, experience and availability of funds. Letters of application, including curriculum vitae and names of three referees should be sent to Prof. M.-P. Ducretet, Department of French, Erindale College, University of Toronto, Mississauga, Ontario, L5L 1C6. Effective July 1, 1980. Applications received until position filled.

LANGUES/LITTÉRATURE/ LINGUISTIQUES

UNIVERSITÉ DE MONTREAL. Programme de Littérature Comparée. L'Université de Montréal recherche un professeur de littérature comparée pour poste de titulaire ou d'agrégé senior, spécialiste du XIXe ou du XXe siècle. Compétences souhaitées dans une autre discipline (par exemple, philosophie, histoire, linguistique, histoire des sciences). Langue d'enseignement: le français. La connaissance d'au moins deux autres langues est indispensable. Timothy J. Reiss, Professeur et responsable, Programme de Littérature Comparée, Université de Montréal, C.P. 6128, Succursale A, Montréal, Québec, H3C 3J7.

UNIVERSITÉ QUEEN'S. Département de français. Le Département de français recherche un professeur adjoint (Assistant Professor) spécialisé dans une ou plus des disciplines suivantes: — linguistique appliquée (le candidat devrait, si possible, être capable d'assumer la responsabilité de l'enseignement du français langue seconde dans l'ensemble de nos programmes); — langue et littérature québécoise; — traduction (enseignement de la traduction et, si possible, direction pédagogique et théorique du programme de traduction dans son ensemble). Ces spécialités peuvent être combinées. Le doctorat est requis, mais il n'est pas nécessaire qu'il ait porté sur l'une des disciplines ci-dessus, si le candidat peut faire la preuve de recherches (publications) et d'expérience dans (les) domaine(s) qu'il(elle) propose. Salaire minimum (1980): \$17,800. Date d'entrée en vigueur: 1er août 1980. Nous voudrions encourager, à parts égales, et les candidatures de femmes et d'hommes. Les demandes, avec le nom de trois répondants à: M. Vernet, Directeur, Département de français, Université Queen's, Kingston, Ontario, K7L 3N6, jusqu'au 1er mai 1980.

LAW

THE UNIVERSITY OF ALBERTA. Department of Industrial and Legal Relations. The University of Alberta, Department of Industrial and Legal Relations in the Faculty of Business Administration and Commerce, invites applications for a full-time, tenure-track position in Legal Relations. Applicants must hold the LL.B. or J.D. degree; further training in law or in a related discipline is highly desirable. The Department offers programs of study in both industrial relations and legal relations, the latter being a new and developing field in Canada which provides a broadly-based interdisciplinary approach to legal studies in business and society. The successful applicant will participate in course and program development. The position is available immediately. Applications should include a curriculum vitae and the names of at least three referees, and should be sent to Professor Michaela Park, Department of Industrial and Legal Relations, 320 Athabasca Hall, The University of Alberta, Edmonton, Alberta, Canada T6G 2G1; telephone, (403) 432-5367.

LIBRARY SCIENCE

UNIVERSITY OF BRITISH COLUMBIA. Library. The University of British Columbia Library has an opening in the Woodward Biomedical Library for a reference librarian effective May 1980. Duties will include reference service with special emphasis in a special area of the health or biological sciences, orientation tours and supervision and coordination of a unit of Woodward Library activities. Candidates must have an academic degree in one of the life sciences and a master's degree in librarianship. Knowledge of a foreign language would be useful. The beginning salary for new graduates is \$18,000. The successful applicant's salary will be based on his/her experience. The University has excellent medical, dental, disability, group insurance and superannuation benefits. Librarians are members of the Faculty Association which negotiates members salary increases with the University Administration. Librarians also are eligible to belong to the Faculty Club of the University of British Columbia offers equal opportunity for employment to qualified male and female applicants. Apply with resume to I.F. Bell, Associate Librarian, University of British Columbia Library, 2075 Westbrook Mall, Vancouver, British Columbia V6T 1W5.

UNIVERSITY OF LETHBRIDGE. Library. Subject to the availability of funds, the Library is seeking a Reference Librarian. The successful candidate will have a Master's degree from an accredited School of Librarianship, a Science degree and a general knowledge of Library automation. Duties will include reference services (including some evening and weekend work), orientation, on line searching and collections development in conjunction with the Science departments. The position is available from July 1, 1980, and will be filled in the rank of Librarian I or II depending on qualifications and experience. The salary range is \$16,284 to \$22,847 (currently under negotiation). Applicants should send a complete resume including the names of three referees by May 15, 1980 to: The Chair, Library Appointment Committee, University Library, University of Lethbridge, Lethbridge, Alberta, T1K 3M4.

UNIVERSITY OF TORONTO. Faculty of Library Science. Assistant Professor. To teach basic and advanced courses and do research in automation of library processes, systems analysis, and theories of information management. Qualifications: Doctorate in Library or Information Science, completed or near completion, and an M.L.S. degree or proven interest in computer applications to information handling. Current minimum salary for rank: \$17,400 (1980-81 salary under negotiation). Position open January 1, 1980; 2-year contractual appointment. Closing date for resumes: April 30, 1980. Send curriculum vitae and names of 3 referees to: Dr. Katherine H. Packer, Dean, Faculty of Library Science, University of Toronto, 141 St. George Street, Toronto, Ontario, M5S 1A1.

MANAGEMENT

UNIVERSITY OF TORONTO. Faculty of Management Studies. Applications are invited for a position as an Assistant/Associate Professor of Management Science and/or Statistics at the Faculty of Management Studies, University of Toronto, available July 1, 1980. This is a Contractually Limited Term Appointment of one year. Salary range is \$20,000 to \$24,000 depending on qualifications. Successful candidates should possess a doctorate in a relevant field. At least four years teaching experience at the University level is required. Secondary interest in Operations Research/Operations Management is desirable. Applications should be submitted to: Professor Roger N. Wolff, Area Coordinator, Management Science and M.S., Faculty of Management Studies, University of Toronto, 248 Bloor Street West, Toronto, Ontario, M5S 1V4.

THE UNIVERSITY OF CALGARY. Faculty of Management. The University of Calgary, Faculty of Management is seeking qualified candidates to fill positions in all areas including Accounting, Policy and Environment, Finance, Industrial Relations, Management, Marketing, Management Science and Management Information Systems beginning July 1, 1980. Ph.D. or

D.B.A. preferred. Rank and salary based on qualifications and experience. Applications should be addressed to: Dr. George S. Lane, Dean, Faculty of Management, The University of Calgary, Calgary, Alberta, T2N 1N4.

McGILL UNIVERSITY. Industrial Relations. McGill University, Faculty of Management, one-year, Visiting Professorship in Industrial Relations, at Assistant or Associate Professor level. Effective date of appointment August 1, 1980. Responsibilities will include teaching undergraduate courses in Public Policy, Industrial Relations in the Public Sector and one graduate course. Some responsibility for supervision of graduate students research will be required. Qualifications will include a Ph.D. complete or in progress, in Management or Economics with an industrial relations emphasis. Rank and salary will be in accordance with qualifications and experience. Send curriculum vitae and the names of three referees to: Professor Frances Bairstow, Director, Industrial Relations Centre, McGill University, 1001 Sherbrooke Street West, Room 515, Montreal, Quebec, H3A 1G5 before May 1st, 1980.

MATHEMATICS

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Sir Wilfred Grenfell College. Department of Mathematics. 1.

Undergraduate teaching position. 2. The College offers a complete range of courses at the first- and second-year university level. 3. A Ph.D. in Mathematics required. 4. Salary and rank dependent upon qualifications and experience. 5. Curriculum vitae and names of three referees to: Mr. E.J.F. Hodgett, Vice-Principal, Memorial University of Newfoundland, SIR WILFRED GRENFELL COLLEGE, University Drive, Corner Brook, Newfoundland, A1A 6S6, September 1, 1980.

UNIVERSITY OF SASKATCHEWAN. Department of Mathematics. Subject to the availability of funds, one or two post-doctoral fellowships will be awarded for a period of one year with the possibility of renewal for a second year. Duties will consist of doing research in geometric topology with special emphasis on continua. Salary will be at NSERC rates (currently \$1075 per month. Applicants should forward curriculum vitae and arrange for three letters of reference to be sent to: E.D. Tymoczko, Department of Mathematics, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF TORONTO. Department of Mathematics. Several appointments at the rank of Tutor for the academic year 1980-81 (September 1 to April 30). Duties can be negotiated to suit the individual but are expected to include first-year lecturing and tutorials, marking, assisting students in the Mathematics Aid Centres and some administrative work. Appointments will be renewable at the pleasure of both parties. The salary floor is \$1,200 per month for eight months (presently under review). Other benefits include pension scheme, group life insurance, disability insurance, dental insurance and hospital and medical insurance provisions. Qualifications include a Master's degree in Mathematics or in a related discipline, and extensive, successful teaching experience at the elementary university level. For some appointees training and experience in Commerce or Economics would be a definite asset. Applicants should send a C.V., including names of 3 referees able to comment on the applicant's mathematical competence, success in teaching, and relevant personal qualities. We would welcome any evidence of excellence in teaching, such as published course evaluations. Qualified individuals who are interested but unsure of their availability should apprise us of their interest, of the contingencies, by April 30th, 1980. Applications and enquiries should be sent to: E.D. Tymoczko, Department of Mathematics, University of Toronto, Toronto, Ontario, Canada, M5S 1A1.

MEDICINE

UNIVERSITY OF ALBERTA. Department of Anatomy. The Department anticipates funding for a vacancy as Assistant Professor, commencing July 1, 1980 and invites applications. The applicant is expected to have a commitment to research and previous teaching experience, preferably in

Neuroanatomy/Histology, is desired. Applications should include a covering letter, curriculum vitae, list of publications and the names of three referees. Applications should be directed before April 30th to: Dr. T.S. Leeson, Professor and Head, Department of Anatomy, University of Alberta, 5-09 Medical Sciences Building, Edmonton, Alberta, Canada, T6G 2H7. The University of Alberta is an equal opportunity employer.

THE UNIVERSITY OF ALBERTA. Faculty of Dentistry. Applications are invited for the full-time (or part-time) positions of director and assistant director for a teaching evaluation project. The Association of Canadian Faculties of Dentistry is conducting a National Clinical Competency Evaluation Project to evaluate clinical teaching and evaluation in most of the Canadian dental schools. The project will involve collecting and analyzing baseline data, co-ordinating evaluation committees, developing and testing the methodology for evaluating the clinical competency of undergraduate dentistry and dental hygiene students. This five-year project will commence in the fall of 1980, and it will be university based with the location yet to be determined. Preference will be given to applicants with experience in student evaluation and measurement and/or knowledge of dental dentistry. Salary is commensurate with experience. Applications, including curriculum vitae and names of references, should be sent to Dean G.W. Thompson, Faculty of Dentistry, Room 3036 Dentistry/Pharmacy Centre, The University of Alberta, Edmonton, Alberta, T6G 2N8, before April 30, 1980. Enquiries can be made by phoning Dr. Thompson at (403) 432-3312.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Faculty of Medicine. The Faculty of Medicine at Memorial University of Newfoundland invites applications for a position as Research Fellow within the discipline of Medicine. The successful candidate will commence activities on July 1, 1980, under the supervision of Faculty Members of the Discipline. Prerequisites will ordinarily include graduation from Medical School plus at least three years of postgraduate training, or alternatively, completion of a Ph.D. program with research interests in an area of Internal Medicine. Remuneration will ordinarily be at the salary rate offered by the Medical Research Council of Canada. Inquiries, accompanied by a curriculum vitae and a statement of research activities, should be forwarded to Dr. G.B. Adams, Acting Chairman, Discipline of Medicine, Memorial University of Newfoundland, Health Sciences Centre, St. John's, Newfoundland, A1B 3V6.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Molecular Virology. Pre and postdoctoral positions are available for studies on the molecular biology of virus replication with special emphasis on early interactions between viruses and cells and on the structure and function of RNA virus genomes. Reply with resume to: Dr. Alfred H. Burness, Faculty of Medicine, Memorial University of Newfoundland, St. John's, Nfld., Canada. A1B 3V6.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Discipline of Pathology. Faculty of Medicine. The Discipline of Pathology at Memorial University of Newfoundland invites applications for a junior staff pathologist appointment having responsibilities in diagnostic services in General Anatomical Pathology and special interests in service and Research Haematopathology at the General Hospital, Health Sciences Centre. Additional duties will include undergraduate and graduate teaching. Candidates should have the Royal College of Physicians and Surgeons of Canada Fellowship in General Pathology. Experience in one or several technical areas such as Electron Microscopy, Immunocytochemistry, Radioisotope and biochemical studies will be an advantage. Please submit application with curriculum vitae and three references to: Dr. Shao-Nan Huang, Professor and Chairman, Discipline of Pathology, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3V6. Closing date for applications is May 1, 1980.

UNIVERSITY OF SASKATCHEWAN. Department of Microbiology. The Department of Microbiology, University of Saskatchewan, has a tenurable vacancy for an Assistant Professor with specialization in Immunology. Appointment is to commence July 1, 1980. Salary to be commensurate with experience. Deadline for receipt of applications: April 30, 1980. Apply to: Dr. D. Eiding, Head, Department of Microbiology, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.

UNIVERSITY OF TORONTO, Department of Clinical Biochemistry and Pathology, Hospital Department, Laboratories. 2) University Title: Assistant Professor (discretion of Chairman of Department). Hospital Title: Head of Division of Clinical Chemistry. 3) Qualifications required: Fellowship in Medical Biochemistry or equivalent. 4) Nature of Duties: Supervision of Clinical Chemistry diagnostic service, participation in research and teaching of medical students, interns, residents, and medical technologists. 5) Salary: dependent on qualification. 6) Person to whom enquiries should be sent: Dr. Alice E. Gray, Director of Laboratories, Women's College Hospital, 76 Grenville Street, Toronto, Ontario, M5S 1B2. 7) Effective Date of Appointment: July 1, 1980. 8) Closing Date for receipt of applications: May 31, 1980.

UNIVERSITY OF TORONTO, Department of Medicine. 1. University Department: Medicine. Hospital Department: Toronto Western Hospital, Medicine. 2. University Title: Assistant Professor or above (commensurate with experience). Hospital Title: Active Attending Physician. 3. Qualifications required: Clinically qualified (F.R.C.P.(C)) and have an interest in research. 4. Nature of Duties: Teaching, patient care and research in Haematology/Oncology. 5. Salary: Existing Unit Budget and practice income to be filling. 6. Person to whom enquiries should be sent: Dr. Michael A. Baker, Toronto Western Hospital, 399 Bathurst Street, Toronto, Ontario, M5T 2S8. 7. Effective Date of Appointment: July 1, 1980. 8. Closing Date for Receipt of Applications: May 15, 1980.

UNIVERSITY OF TORONTO, Faculty of Medicine. 1. University Department: Pathology. Hospital Department: Pathology. 2. University Title: Lecturer. Hospital Title: Staff Pathologist. 3. Qualifications required: Certification in anatomical pathology from the Royal College of Physicians and Surgeons of Canada and the L.M.C.C. are required and preference may be given to individuals with experience and special training particularly in electron microscopy or tumour pathology. 4. Nature of Duties: Hospital diagnostic pathology, research and teaching. 5. Salary: Commensurate with qualifications and experience. 6. Person to whom enquiries should be sent: Dr. T.C. Brown, Department of Pathology, Princess Margaret Hospital, 500 Sherbourne Street, Toronto, Ontario, M4X 1K9. 7. Effective Date of Appointment: July 1, 1980. 8. Closing Date for Receipt of Applications: May 1, 1980.

UNIVERSITY OF TORONTO, Faculty of Medicine, Radiological Research Laboratories. 2. Assistant Professor or Associate Professor (Senior Physicist/Engineer). 3. Qualifications required: Ph.D. and extensive experience in medical imaging. Through scientific publication, awards of grants, and peer recognition, must have demonstrated the ability to carry on a research program in this field. 4. Nature of Duties: Carrying on research program in medical imaging, taking part in teaching program of Research Laboratories; provide consultation and advice to the Ministry of Health of Ontario on all aspects of X-ray physics and technology and on radiation safety and X-ray dose reduction. Includes setting standards for safe use and performance of medical imaging systems, design of dose and quality control programs and assistance with education in these topics throughout the Province. 5. Salary: Commensurate with experience. 6. Person to Whom Enquiries Should be Sent: Reply in writing, enclosing Curriculum Vitae, to: K.W. Taylor, Associate Director, Radiological Research Laboratories, Medical Sciences Building, University of Toronto, Toronto, Ontario, M5S 1A8. 7. Effective Date of Appointment: June 1, 1980. 8. Closing Date for Receipt of Applications: May 1, 1980.

UNIVERSITY OF TORONTO, Department of Radiology, Hospital Department: Radiological Science 2) University Title: Professor or Associate Professor. Hospital Title: Radiologist-in-Chief. 3) Qualifications required: Certification in Diagnostic Radiology of the Royal College of Physicians and Surgeons of Canada and the L.M.C.C. Recognized as a skilled Radiologist, an experienced teacher, and will preferably have had previous administrative experience. The candidate will have had some background in research and will be interested in furthering the teaching and research objectives of the Department. 4) Nature of Duties: Mount Sinai Hospital, a 510 bed acute care, teaching hospital, affiliated with the University of Toronto re-

quires a Radiologist-in-Chief, Mount Sinai Hospital, opened 1974, is the Department of Radiological Sciences is therefore a newly designed and well equipped department, providing a full range of diagnostic procedures. The Department consists of the Divisions of Ultrasound (20,993 examinations per year); Nuclear Medicine (12,554 examinations per year); and Diagnostic Radiology (83,437 examinations per year). CT Scanning facilities are currently shared with the Toronto General Hospital which is joined by Tunnel to Mount Sinai Hospital. The Department is approved for the training of residents in Diagnostic Radiology and Nuclear Medicine through the post-graduate training programme of the University of Toronto. In addition, the Department is approved for the training of Radiological and Nuclear Medicine Technologists. 5) Salary: commensurate with experience. 6) Person to whom enquiries should be sent: Search Committee, c/o Executive Director, Mount Sinai Hospital, 600 University Avenue, Toronto, Ontario, M5G 1X5. 7) Effective Date of Appointment: July 1, 1980. 8) Closing Date for receipt of Applications: May 1, 1980.

UNIVERSITY OF TORONTO, Department of Speech Pathology (Rehabilitative Medicine). 2. University Title: Assistant Professor — tenure stream. 3. Qualifications required: Ph.D. with proven teaching and research capabilities. A strong background in the neurologically based disorders of communication which would include direct and comprehensive clinical experience with these disorders. 4. Nature of duties: Participation in a graduate program in speech pathology with teaching, research and possible thesis supervision. Excellent opportunity for collaboration with departments in the medical and dental sciences. 5. Salary: Depending on experience and qualifications. 6. Person to whom enquiries should be sent: Professor J.F. Walker, Chairman, Graduate Department of Speech Pathology, Faculty of Medicine, University of Toronto, Toronto, Ontario, M5S 1A1. 7. Effective date of appointment: June 1, 1980, or as soon thereafter as possible. 8. Closing date for receipt of applications: May 1, 1980.

UNIVERSITY OF WESTERN ONTARIO, Department of Otolaryngology, University of Western Ontario, Department of Otolaryngology, University of Western Ontario, 100 Waterloo Street, London, Ontario, N6B 2M5. UNIVERSITY OF TORONTO, Department of Medicine. For Director of the Core Lipid Lab for the Lipid Research Clinic Program by July 1, 1980. Ph.D. or M.D. biochemist experienced in lipids and lipoproteins. Salary and rank according to experience, up to Associate Professor. Cross appointment with a basic science department is possible. Write Dr. J.A. Little, Project Director, 1 Spadina Cres., Toronto, Ontario, M5S 2J5, phone 416-978-4944.

MUSIC

BRANDON UNIVERSITY, School of Music. 1. Applications invited for the position of Clarinet instructor and performer. 2. Minimum of Master's degree and demonstrated ability as a performer required. 3. Duties include performances as member in faculty ensembles; teaching of clarinet majors and senior Conservatory students; assisting with the teaching of Woodwind Techniques or another area of instruction (Appreciation, History, Musicianship, etc.). 4. Salary and rank commensurate with qualifications and experience. 5. Letter of application, references and curriculum vitae to: Dr. Lorne Watson, Director, School of Music, Brandon University, Brandon, Manitoba, R7A 6A9. 6. Date of appointment: September 1, 1980. 7. Closing date: When position filled.

QUEEN'S UNIVERSITY, Music Department. The Department expects to be able to offer the following position: Rank: Lecturer or Assistant Professor. Term: year. A non-renewable, eight-month replacement appointment, from September 1, 1980 to April 30, 1981. Salary: 12,000 or 13,000. Field: Musicology. Qualifications: Ph.D. preferred; teaching experience desirable. Teaching Duties: 3 full undergraduate courses, including one in World Musics. Closing Date for Applications: April 15, 1980, or when

position is filled. Apply to: Prof. I. Anhall, Head, Music Department, Harrison-LeCaine Hall, Queen's University, Kingston, Ontario, Canada K7L 3N6. Telephone (613) 547-5783. Candidates of both sexes are equally encouraged to apply.

WILFRID LAURIER UNIVERSITY, Faculty of Music. 1. Assistant/Associate/Professor: music history. 2. Ph.D. with strong interest in teaching; special interest in eighteenth and nineteenth century preferred; active research an asset. 3. Teach undergraduate history courses from surveys to specialized seminars. 4. Salary negotiable. 5. Dr. Gordon K. Greene, Dean, Faculty of Music, Wilfrid Laurier University, Waterloo, Ontario, N2L 3C5. 6. July 1 or September 1, 1980. 7. When position filled.

NATIVE STUDIES

ST. THOMAS UNIVERSITY, Native American Studies. St. Thomas University, Fredericton, N.B., invites applications for the position of visiting professor of Native Studies. The appointment is for one year beginning 1 July 1980. This position is open to all ranks and areas of specialization within the field of North American Indian Studies. Salary is dependent upon qualifications and is subject to budgetary approval. Candidates must have completed the M.A., but Ph.D., or near, preferred. Responsibilities include undergraduate teaching and assisting director in developing a Native Studies programme. Applicants should file immediately. Send vitae and two letters of recommendation to Dr. H. Goltz, Director of Native Studies, St. Thomas University, Fredericton, N.B. E3B 5G3.

BRANDON UNIVERSITY, Special Projects, Department of Native Studies. Position: Travelling Professor, Native Studies, for the months of May, June, July, 1980. Salary: \$1350.00 per half course x \$3 = \$4050.00 plus travelling allowance and expenses. Qualifications: Minimum Master's degree with experience in cross-cultural or native studies. Duties: To teach "Introduction to Native Studies I" at Split Lake, Manitoba — May 5-30, 1980; "Introduction to Native Studies I" at Grand Rapids, Manitoba — June 2-27, 1980; "Introduction to Native Studies I" at God's Lake Narrows, June 30-July 23, 1980. Send application along with placement file or curriculum vitae (original transcripts) and three letters of reference to: Dr. M. Blamar, Dean, Faculty of Arts, Brandon University, Brandon, Manitoba, R7A 6A9. Closing Date: April 30, 1980.

NATURAL RESOURCES MANAGEMENT

SIMON FRASER UNIVERSITY, Master of Natural Resources Management Program. The Master of Natural Resources Management Program and the Department of Geography at Simon Fraser University expect to make a tenure-track joint appointment at the Assistant or Associate Professor rank for September 1980. The successful applicant will work in an interdisciplinary setting teaching regional and local planning, and some combination of planning and management of energy or recreation resources, or environmental impact assessment. Canadian experience and a Ph.D. are essential qualifications. First consideration will be given to those who are legally eligible to work in Canada at the time of application. The appointment will be made subject to the availability of funds. Closing date will be 30 April 1980. Applicants should send a curriculum vitae, including the names of three references to Dr. J.C. Day, Director, Master of Natural Resources Management Program, Simon Fraser University, Burnaby, B.C. V5A 1S6.

NURSING

THE UNIVERSITY OF ALBERTA, Faculty of Nursing. The University of Alberta, Faculty of Nursing invites applications for positions beginning 1 July 1980. Master's degree and relevant clinical experience required; Post-Master's preparation or Ph.D. preferred. Teaching primarily in undergraduate programs (Basic and/or Post-R.N.), but some graduate teaching possible for suitable candidates; joint clinical appointments may be arranged for interested candidates. Two

continuing vacancies exist; appointment possible at Assistant or Associate Professor rank depending on qualifications. Prefer candidates with some combination of pediatric, nurse-midwifery and/or community health background. Three full-time seasonal appointments (8 month period) to replace staff on leave; rank and salary will depend on qualifications. Prefer candidates with administration, adult acute care or pediatric background. The University of Alberta is an equal opportunity employer. Please send enquiries and applications to: Dr. Amy Zelman, Dean, Faculty of Nursing, The University of Alberta, Edmonton, Alberta, T6G 2G3.

UNIVERSITY OF NEW BRUNSWICK, Faculty of Nursing. The Faculty of Nursing, University of New Brunswick has positions available July 1, 1980 for teachers in baccalaureate program. Areas: Medical-Surgical Nursing, teaching senior students in clinical area and classroom; 2) Community Nursing, teaching freshman students in the classroom, and supervising community visits for second year students; 3) Maternal and Child Health, in pediatric with second year students, the Nursery with third year students. Students are divided into small groups of clinical experience. Applicants should be able to qualify for rank of Assistant or Associate Professor. Apply with curriculum vitae and three references to: I. Leckie, Dean, Faculty of Nursing, University of New Brunswick, P.O. Box 4400, Fredericton, N.B. Closing date: When positions filled.

ST. FRANCIS XAVIER UNIVERSITY, Department of Nursing. Applications are invited for the following positions for the academic year beginning August 1, 1980 in a basic baccalaureate program. Experienced teachers in both the acute care clinical setting and the classroom, in Medical-Surgical and/or Child Care. Doctoral degree preferred. Masters degree essential. Salary in accordance with qualifications and experience. Applications should be addressed to: Ellen Murphy, Chairman, Department of Nursing, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 1C0. Telephone 802-867-2266, 802-867-3955.

UNIVERSITY OF SASKATCHEWAN, College of Nursing. Faculty positions will be available in the College of Nursing, July 1, 1980. Applicants with doctoral or masters' degree will be considered for tenurable appointment. Limited term appointments will also be available to replace faculty on leave of absence. The undergraduate baccalaureate program is integrated and conceptually based. Team teaching is the mode used in most classes and all faculty are expected to have specialization in a clinical area and to participate in clinical supervision of students. Level of appointment and salary will be commensurate with previous experience in teaching, research and clinical nursing. Further information may be received from: Hester J. Kerns, Professor and Dean, College of Nursing, University of Saskatchewan, Saskatoon, Sask., S7N 0W0.

CONCORDIA UNIVERSITY, Nursing Programme. The Nursing Programme of Concordia University anticipates a faculty position at the rank of Assistant Professor in the non-tenured track. In addition to regular teaching duties, the successful candidate will participate in the innovation and implementation of a curriculum for graduate nurses. Qualifications will include: M.Sc.N. from recognized University School of Nursing; experience in hospital and community nursing; experience in University nursing education; interest in curriculum development; interest in further education of experienced graduate nurses; innovative, creative, and research-oriented. Bilingual in English and French an asset. The appointment will be available from June 1, 1980. Applications, including curriculum vitae and the names of at least three referees, should be sent to: Muriel Upchurch, Ph.D., Professor and Director, Community Nursing, Concordia University, 7270 Sherbrooke Street West, Montreal, Quebec, H4B 1R6.

PHARMACY

DALHOUSIE UNIVERSITY, College of Pharmacy. Applications are invited from persons with a Ph.D. degree in the area of physical pharmacy/pharmaceutics. The successful candidate will be expected to teach physical pharmacy/pharmaceutics to both undergraduate and graduate students. A definite commitment to research is essen-

tial. The position which is subject to final budget approval is available from July 1, 1980. Interested candidates should send their curriculum vitae and the names of three references to Dr. David K. Yung, Director, College of Pharmacy, Dalhousie University, Halifax, Nova Scotia, B3H 3J5, Canada.

PHILOSOPHY

UNIVERSITY OF WINNIPEG. Department of Philosophy. 1. Assistant professor, seasonal appointment subject to availability of funding. 2. Ph.D. 3. Undergraduate teaching; a main area of specialization should be Classical Greek Philosophy. 4. Salary to be negotiated. 5. Dr. Brian M. Kennan, Chairman, Department of Philosophy, University of Winnipeg, Winnipeg, Manitoba, R3B 2E9. 6. September 1, 1980. 7. When position filled.

PHYSICAL EDUCATION/ RECREATION

CONCORDIA UNIVERSITY. Biophysical Education Department. The Department of Biophysical Education invites applications for an anticipated position at the Assistant Professor level to teach courses in the principles and practices of leisure services and the organization and administration of Recreation Programmes, and be able to supervise students in their recreation internship. Involvement and participation in professional organizations and a demonstrated competence and commitment to scholarship. Earned doctorate preferred. Effective date: June 1, 1980. Applicants should send a recent curriculum vitae and the names of referees to: Dr. William R. Sellers, Chairman, Biophysical Education Department, Concordia University (Loyola Campus), 7141 Sherbrooke Street, West, Montreal, Quebec, H4B 1R6.

CONCORDIA UNIVERSITY. Bio-Physical Education Department. Exercise Science/Neuromuscular Physiology Position. The Department of Bio-Physical Education of Concordia University at Montreal invites applications for an anticipated position to teach courses in neuromuscular physiology, the neuromotor basis of human motion, and the prevention and rehabilitation of athletic injuries. Involvement and participation in professional organizations with a demonstrated competence and commitment to scholarship. Appointment at Assistant Professor. Qualifications: Doctorate preferred, teaching experience, and published research. Effective Date: June 1, 1980. Applicants should send a recent curriculum vitae and the names of referees to: Dr. William R. Sellers, Chairman, Bio-Physical Education Department, Loyola Campus, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec, H4B 1R6.

CONCORDIA UNIVERSITY. Bio-Physical Education Department. Human Anatomy/Kinesiology Position. The Department of Bio-Physical Education of Concordia University at Montreal invites applications for a position to teach courses in Human Anatomy, Kinesiology and Biomechanics. Involvement and participation in professional organizations with a demonstrated competence and commitment to scholarship. Appointment at Assistant Professor. Qualifications: Doctorate preferred, teaching experience, and published research. Effective Date: June 1, 1980. Applicants should send a recent curriculum vitae and the names of referees to: Dr. William R. Sellers, Chairman, Bio-Physical Education Department, Loyola Campus, Concordia University, 7141 Sherbrooke Street, West, Montreal, Quebec, H4B 1R6.

UNIVERSITY OF LETHBRIDGE. Department of Physical Education. 1. One position at the Assistant Professor level subject to the availability of funding. 2. Ph.D. preferred. 3. Primary teaching responsibilities selected from Biomechanics, Athletic Training, Creative and Children's Dance, and Women's Gymnastics. Secondary responsibilities will be selected from among: Anatomy, Motor Skill Learning, Social Dance, Folk Dance, Modern and Educational Gymnastics. Other responsibilities may include the administration and supervision of the Athletic Training Program. 4. Salary Schedule (1979-80): Assistant Professor — \$20,446-\$28,616. 5. Applications, including a curriculum vitae, transcripts and three letters of reference should be sent to: Associate Dean, Division of Fine Arts and

Physical Education, University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, T1K 3M4. 6. Probationary appointment for one year beginning July 1, 1980. 7. Closing date: 15 April 1980 or when position is filled.

UNIVERSITY OF TORONTO. School of Physical and Health Education. The School of Physical and Health Education at the University of Toronto, Toronto, Ontario, invites applications for the following position. Title of position: Assistant Professor in Biomechanics/Kinesiology. Qualifications: Doctoral Degree, Teaching Experience, Published Research, Competency in an Activity Area. Nature of Duties: Teach undergraduate courses in Biomechanics/Kinesiology. Establish a research programme independently as well as in concert with the development of an Institute for the Study and Evaluation of High Performance in Athletics. Salary: Salary floor for Assistant Professor — \$17,400 per annum. Appointment Date: July 1, 1980. Interested applicants should forward a letter of application, full curriculum vitae, and a list of referees (with phone numbers) to: Dr. Roy J. Shephard, Director, School of Physical and Health Education, University of Toronto, 320 Huron Street, Toronto, Ontario, M5S 1A1. Closing Date: As soon as possible.

UNIVERSITY OF TORONTO. School of Physical and Health Education. 1. Assistant Professor, Social Psychology/Leisure and Health Promotion. 2. Doctoral Degree; teaching experience; published research; competency in an activity area. 3. Develop and teach undergraduate courses in Sociology and Psychology of Leisure and Health Promotion. Establish a research programme independently as well as in concert with (1) A Life-Style Research Centre and (2) An Institute for the Study and Evaluation of High Performance in Athletics. 4. Commensurate with rank and experience. 5. Dr. Roy J. Shephard, School of Physical and Health Education, 320 Huron Street, University of Toronto, Toronto, Ontario, M5S 1A1. 6. July 1, 1980. 7. As soon as possible.

UNIVERSITY OF TORONTO. School of Physical and Health Education. 1. Assistant Professor in Sports/Exercise Physiology. 2. Doctoral degree; teaching experience; published research; competency in an activity area. 3. Teach undergraduate courses in physiology and ergonomics as applied to sport and physical activity. Undertake related research independently as well as in concert with (1) A Life-Style Research Centre and (2) An Institute for the Study and Evaluation of High Performance in Athletics. 4. Commensurate with rank and experience. 5. Dr. Roy J. Shephard, School of Physical and Health Education, 320 Huron Street, University of Toronto, Toronto, Ontario, M5S 1A1. 6. July 1, 1980. 7. As soon as possible.

UNIVERSITY OF WINNIPEG. Department of Recreation and Athletic Studies. Title of Position: Three appointments of varying duration at the rank of Lecturer, Assistant or Associate Professor. Qualifications: Ph.D. preferred. Duties: Two positions will be in Coaching/Leisure Studies; the third position will be in Sports Science. Salary: Commensurate with qualifications and experience. Inquiries: Dr. Ross McCormack, Assistant Dean of Arts and Science, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba, R3B 2E9. Effective Date: September 1, 1980. Closing: When Position filled.

DALHOUSIE UNIVERSITY. School of Physical Education, Recreation Division. 1. Assistant or Associate Professor. 2. Earned doctorate or equivalent preferred. 3. Undergraduate teaching in at least two of the areas of recreation and leisure for the disabled, fiscal management in parks and recreation, program development in recreation and introduction to recreation. There would be an expectation to contribute to the graduate program. 4. Salary commensurate with qualifications and experience. 5. Position dependent on budget approval. 6. First consideration given to applicants presently eligible for employment in Canada. 7. Dr. T.L. Maloney, Director, School of Physical Education, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 3J5.

UNIVERSITY OF WATERLOO. Department of Recreation. 1. Assistant or Associate Professor in Recreation Management. 2. Earned doctorate or its near completion in related discipline. 3. Ability to successfully supervise student theses and honors projects with a broad interdisciplinary view of graduate and undergraduate instruction and continued involvement and participation in professional organizations with a

demonstrated competence and commitment to scholarship. 4. Assistant professor (minimum \$18,400), Associate professor (minimum \$23,900). Salary commensurate with qualifications and experience. 5. Dr. David Ng, Chairman, Department of Recreation and Physical Education, Waterloo, Ontario, N2L 3G1. 6. Subject to the availability of funds. Until position is filled, first consideration will be given to those applicants who at the time of application are legally eligible to work in Canada for the period covered by this position.

ACADIA UNIVERSITY. School of Recreation and Physical Education. Head Football Coach. Position: A Staff position as Head Football Coach. Under the direction of the Dean/Director of Athletics of the School of Recreation and Physical Education, to be responsible for the overall development, organization, implementation, supervision and evaluation of the intercollegiate football program and related program areas. This position could also include other administrative and/or academic responsibilities within the School, depending upon qualifications and specific interests of successful applicant. Qualifications: Master's Degree desirable, as well as proven coaching experiences. Term and Date of appointment: By mutual agreement of both parties. Salary: Contingent upon qualifications and experience. Application Procedure: Send resume and credentials to: Chairman, Selection Committee — Football, School of Recreation and Physical Education, Acadia University, Wolfville, Nova Scotia, B0P 1X0.

PHYSICS

TRENT UNIVERSITY. Department of Physics. Trent University is seeking a candidate with a Ph.D. to fill a vacancy as Assistant Professor. The successful candidate will have undergraduate teaching duties, and will contribute to existing research fields in the Department. The 1979-80 salary level for the position is \$17,570. The position will start on July 1, 1980, and it may continue beyond June 30, 1981 (subject to the availability of funds). Interested individuals should send a full C.V. including the names of three referees to: J.W. Earnshaw, Chairman of Physics, Trent University, Peterborough, Ontario, K9J 7B8.

UNIVERSITY OF CALGARY. Department of Physics. An opening exists at the bottom of the Assistant Professor rank starting July 1, 1980. The applicant should have research experience in one of the following areas: Astrophysics and Astronomy; Applied Radioactivity; Atmospheric Physics; Biophysics; Electron Paramagnetic Resonance; Mass Spectrometry. Applicants should send a curriculum vitae and three letters of references sent to: Dr. C.A. Cumbe, Physics Department, The University of Calgary, 2920 — 24th Avenue N.W., Calgary, Alberta, T2N 1N4.

UNIVERSITY OF TORONTO. SCARBOROUGH COLLEGE. Physical Sciences Division. The Physics group at the Scarborough campus of the University of Toronto requires an Instructor or Tutor to supervise undergraduate physics laboratories and to participate in the development of new laboratory experiments, to conduct tutorials, and to develop and present lecture demonstrations. Candidates must have a bachelor's or higher degree in physics; the salary will be commensurate with qualifications and experience. The initial appointment will be for one year commencing July 1 or September 1, 1980, with the possibility of annual renewal. Applications, including a curriculum vitae and the names of three referees, should be sent by May 1, 1980, to: Professor John Dove, Chairman, Physical Sciences Division, Scarborough College, University of Toronto, 1265 Military Trail, West Hill, Ontario, Canada, M1C 1A4. Reference No. PT.

UNIVERSITY OF TORONTO. SCARBOROUGH COLLEGE. Physical Sciences Division. Physics. One or two year visiting (limited term) Assistant Professor starting July or September 1980 or January 1981. (Subject to budgetary approval). Ph.D. in Physics required with good lecturing and teaching ability. Principal duties are undergraduate teaching at the Scarborough Campus. Opportunities for research are available in the Department of Physics on the St. George Campus. Send curriculum vitae and names of three referees to: Chairman, Physical Sciences Division, Scarborough College, West Hill, Ontario, M1C 1A4. Reference No.: P/A P1

POLITICAL SCIENCE

QUEEN'S UNIVERSITY. Department of Political Studies. Political Science. Queen's University invites applications for two positions at the rank of lecturer or assistant professor. These are placement positions for a maximum of three years and are non-renewable. Applicants must be qualified to teach at least one, preferably two of: American Government, Quantitative Methods, Canadian Government, Comparative Government, International Relations, Political Theory. Ph.D. or near completion. Salary according to qualifications and experience. Candidates of both sexes are equally encouraged to apply. Replies to Professor J.A.W. Gunn, Department of Political Studies, Queen's University, Kingston, Ontario, K7L 3N6. Closing date: as soon as possible.

UNIVERSITY OF CALGARY. Department of Political Science. Applications are invited for a full-time, renewable, position at the Assistant professor level in one of the following areas: 1. International Law, International Organizations; 2. Public Policy, with special emphasis on Energy to commence July 1, 1980. Duties: Teaching at graduate and undergraduate levels, and research. Salary: Approx. \$20,000 to \$26,000 (to be revised upward July 1, 1980). Applications, with CV and names of three referees, should be sent to: Dr. A. Parel, Chairman, Department of Political Science, The University of Calgary, 2920 — 24th Avenue N.W., Calgary, Alberta, T2N 1N4.

CARLETON UNIVERSITY. Department of Political Science. Applications are invited for the Assistant or Associate Professor rank for a preliminary appointment in Comparative Politics and Developing Areas with emphasis on Africa. A subsidiary specialty in Public Administration in Developing Countries would be desirable. Candidates should hold a Ph.D. degree. Duties will include teaching undergraduate and graduate courses, and graduate supervision. Salary in accord with qualifications. Effective date of appointment July 1, 1980. The position is subject to budgetary approval. Open until filled. Applications, curriculum vitae, and the names of at least three qualified referees should be sent as soon as possible to: Professor Robert E. Bedeski, Chairman, Department of Political Science, Carleton University, Ottawa, Ontario, K1S 5B6.

CONCORDIA UNIVERSITY. Department of Political Science. Applications are invited for a full-time position at the Assistant or Associate level commencing September 1980, subject to budgetary approval. Applicants should have completed the Ph.D., have teaching experience and an established publication record. Expertise is sought in the areas of public policy, public administration, urban politics, and methodology with emphasis on Quebec and Canada. A knowledge of the Québec milieu and the French language is desirable. Send full curriculum vitae and names of three referees to: E.M. Price, Chairman, Department of Political Science, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec, H4B 1R6.

DALHOUSIE UNIVERSITY. Department of Political Science. A position in Canadian government and politics is available in the Department of Political Science, Dalhousie University, effective July 1, 1980. The position may be at any academic level and will be filled by an individual (1) with a completed doctorate, (2) several years of full-time teaching experience, (3) significant contributions to the scholarly literature of Canadian government and politics, (4) a genuine interest in teaching at the introductory level, as well as more senior-level courses in Canadian government and politics. Those interested may correspond confidentially with: Dr. Dale H. Poel, Chairman, Department of Political Science, Dalhousie University, Halifax, Nova Scotia, B3H 4H6; or, alternatively, may feel free to call me collect at (902) 423-2392. (Subject to budgetary considerations.)

UNIVERSITY OF WATERLOO. Department of Political Science. Applications are being accepted for the position of Lecturer or Assistant Professor. Qualifications include Ph.D. or equivalent. Duties include teaching in comparative politics at the graduate (M.A.) level and the undergraduate level, plus introductory politics and one other area. Salary minimum for assistant professor in 1979-80 was \$18,400. Interested persons should send applications to Dr. Robert J. Williams, Chairman, Department of Political Science, University of Waterloo,

Waterloo, Ontario, N2L 3G1. Effective date of appointment is July 1, 1980. Closing date for receipt of applications is April 30, 1980. First consideration will be given to those applicants who have a degree of application are legally eligible to work in Canada for the period covered by this position. The availability of this position is subject to budgetary approval.

PSYCHOLOGY

UNIVERSITY OF WINNIPEG. Department of Psychology. The University of Winnipeg requires a Developmental Psychologist for a tenure-track appointment at the level of assistant or associate professor. The appointment will be in the areas of social and/or personality development; however, applicants with established research records in other areas of developmental psychology are invited to apply. Appointment date will be September 1, 1980. Applicants should apply by sending their vitae plus three letters of reference to: Dr. Robert Guttentag, Department of Psychology, University of Winnipeg, Winnipeg, Manitoba, Canada, R3B 2E9.

ACADIA UNIVERSITY. Department of Psychology. The Department of Psychology at Acadia University invites applications for a ten-month sessional appointment to replace a member on sabbatical leave. Candidates should have a Ph.D. in psychology and specialization in the areas of clinical and social psychology and mental retardation. The successful applicant will be responsible for teaching 2 1/2 courses (including one semester of Introductory psychology) and for supervising advanced students in research and practicum. The 1979-80 salary for a 10-month sessional appointment at the level of assistant professor was approximately \$14,200.00, plus some assistance with moving expenses. Appointment is subject to budgetary approval. Closing date for applications is April 30, 1980. Interested applicants should send curriculum vitae and three letters of reference to: Dr. Richard Krane, Search Committee, Department of Psychology, Acadia University, Wolfville, N.S., Canada, B0P 1X0.

UNIVERSITY OF ALBERTA. Department of Psychology. Experimental and Social Psychologists. The Department of Psychology invites applications for a tenurable appointment in experimental social psychology at the Assistant Professor level (starting salary range 1979/80 \$19,696 to \$20,536, currently under negotiation for 1980/81). Preference will be given to persons with demonstrated research competence in memory, decision making, or information processing. Candidates should send a curriculum vitae, transcripts, three letters of reference, and a statement of their teaching and research interests, to: Michael E. Endle, Chairman, Social Area Search Committee, Department of Psychology, University of Alberta, Edmonton, Alberta, Canada, T6G 2E9. The appointment is for July 1, 1980. An Equal Opportunity Employer.

UNIVERSITY OF BRITISH COLUMBIA. Department of Psychology. The University of British Columbia, Department of Psychology, invites applications for a tenure track position in social psychology. Complete curriculum vitae and names of referees should be forwarded to: Chairman, Faculty Search Committee, Department of Psychology, University of British Columbia, Vancouver, B.C., Canada, V6T 1W5. Rank is open (Assistant - Full Professor) depending upon qualifications. Salaries are competitive. The position is subject to budgetary considerations. The University of British Columbia offers equal opportunity for employment to qualified male and female candidates.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND. Sir Wilfred Grenfell College, Department of Psychology. 1. Undergraduate teaching position. 2. The College offers a wide range of courses at the first and second year university level. Major responsibilities would include teaching introductory Psychology courses and second-year courses for majors and non-majors in Psychology. 3. Salary and rank dependent on qualifications and experience. 4. Ph.D. preferred. Curriculum vitae and names of three referees to: Mr. E.J.F. Hodgett, Vice-Principal, Memorial University of Newfoundland, SIR WILFRED GRENFELL COLLEGE, University Drive, Corner Brook, Newfoundland, A2H 6P9. 6. September 1, 1980.

QUEEN'S UNIVERSITY. Department of

Psychology. Applications are invited for two positions at the level of Assistant Professor. The first of these is for a Clinical Psychologist with active involvement in clinical training and service. Applicants should also have an excellent research record, and should note that the orientation of the clinical programme is strongly empirical/behavioral. The second position is not restricted as to field, but preference will be given to candidates in some area of biopsychology. The first position is a regular three year appointment, i.e. a tenure-track appointment according to regulations recently adopted at Queen's. The second position is subject to budgetary approval and may be a regular appointment or a one- or two-year limited contract. Applicants for this position must also have demonstrated independent research ability at a high level; some teaching experience is desirable but not necessary. Letters of application, together with a curriculum vitae and the names of three referees should be sent to: Dr. P.C. Doodwell, Head, Department of Psychology, Queen's University, Kingston, Ontario, K7L 3N6. Preference will be given to Canadian Citizens and Landed Immigrants: men and women are encouraged equally to apply.

UNIVERSITY OF SASKATCHEWAN. Department of Psychology. Clinical/Community Psychologist: Teaching and supervision of students in an A.P.A. accredited clinical program at the University of Saskatchewan. Applicants should have completed all clinical Ph.D. requirements. They should have a strong commitment to the scientist-practitioner model and be actively engaged in research. The University is located in the south central part of the province in a city of 145,000. Send curriculum vitae and three (3) letters of recommendation to: Dr. Wm. H. James, Director, Clinical Training, Department of Psychology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF WATERLOO. Department of Psychology. Applications are being accepted for the position of Assistant Professor in Industrial/Organizational Psychology. While applicants in all areas of psychology will be considered, those with special competence and interest in organizational behavior will receive special consideration. Regardless of area of specialization, applicants should show considerable promise as a scholar and a commitment to the development of a strong, independent, sustained research program. In addition to research, responsibilities include teaching at both the graduate and undergraduate levels and supervision of students in research. The person hired will be expected to contribute to the development of an expanded Ph.D. program in I/O and to an ongoing Master of Applied Science program in I/O. The salary is competitive; final appointment depends on availability of funds. Persons eligible for employment in this position at the time of application will receive first consideration. Applications will be accepted until June 1, 1980 or until the position is filled; the appointment can begin as early as September 1, 1980. Direct a complete vitae, the names and addresses of at least three references, and samples of scholarly work (e.g., reprints or preprints) to: Dr. T. Gary Waller, Chairman, Department of Psychology, University of Waterloo, Waterloo, Ontario, N2L 3G1.

UNIVERSITY OF WINNIPEG. Department of Psychology. The University of Winnipeg is seeking a person to teach in a sabbatical leave position. The specific courses to be taught are Introductory Psychology, The Psychology of Sex Differences, a fundamental course on animal conditioning, Behaviour Modification and an introductory course in research design and applied statistics. The possibility of a Neuroscience course would make some background in this area helpful as well. All of the courses, except for Introductory Psychology are half-term courses. Previous teaching experience in these areas is desirable. The sessional contract will be for 10 months. The applicant should have at least the equivalent of an M.A. degree or higher in Psychology. Preference will be given to those holding Canadian citizenship or landed-immigrant status. Please send a curriculum vitae, and indicate on it the names and addresses of three references whom we may contact should there be a need for this, to: Dr. G.F. Norton, Department of Psychology, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba, R3B 2E9.

ST. THOMAS MORE COLLEGE. UNIVERSITY OF SASKATCHEWAN. Department of Psychology. Applications are invited for a possible term appointment at the Assistant

Professor level for the 1980-81 academic year. Preference will be given to candidates with a Ph.D., some teaching experience, with specialization in Developmental or Social Psychology, and skills in one other area. Primary duties will involve undergraduate teaching with an opportunity for research, and teaching and supervision of graduate students. The salary scale for Assistant Professor, currently under negotiation, is \$18,415 - \$23,365 (1978-79). There are annual increments, a full range of fringe benefits, and a moving allowance. There is also opportunity for teaching in the summer and summer school classes. St. Thomas More College is a Catholic College of Arts and Science federated with the University of Saskatchewan. Its professors are members of the faculty of the College of Arts and Science, with some also being members of the faculty of the College of Graduate Studies, of the University of Saskatchewan. Interested persons should arrange to have a curriculum vitae, 3 letters of recommendation, and transcripts sent as soon as possible to: Dr. E. Jastrebek, Department of Psychology, St. Thomas More College, 1437 College Drive, Saskatoon, Saskatchewan, S7N 0W6.

UNIVERSITY OF WINNIPEG. Department of Psychology. The University of Winnipeg is seeking a person to teach in the area of Social Psychology and Personality Theory with some background in either Humanistic or Environmental Psychology. The appointment is for a one year sessional position. Applicants should at least have the equivalent of an M.A. degree in Psychology. Preference will be given to qualified applicants who hold Canadian citizenship or landed-immigrant status. Please send curriculum vitae and three letters of reference to: Dr. R. Guttentag, Department of Psychology, University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba, R3B 2E9.

RELIGIOUS STUDIES

THE UNIVERSITY OF ALBERTA. Department of Religious Studies. Requires a Historian of Religion with particular competence in Islamics for a one-year sabbatical replacement. Undergraduate teaching. Ph.D. preferred. Appointment begins September 1, 1980. Send resume to: Dr. Earle Waugh, Chm., Department of Religious Studies, University of Alberta, Edmonton, Alberta, Canada, T6G 2E5.

UNIVERSITY OF CALGARY. Department of Religious Studies. Tenurable Appointment. Area: Islam and Eastern Religions. Rank: Assistant Professor. Qualifications: Ph.D. and teaching experience. Salary: Current scale - Assistant Professor \$20,094 - \$26,282. Applications along with curriculum vitae and list of three referees to: Dr. H. Coward, Head, Department of Religious Studies, The University of Calgary, 2520 - 24th Avenue N.W., Calgary, Alberta, Canada, T2N 1N4. Commencing Date: July 1, 1980.

UNIVERSITY OF MANITOBA. Department of Religion. Applications are invited for a term appointment at the Assistant Professor level. Position begins on July 1, 1980. Competence in one or more of the following areas is desired: Religion and Culture, Modern Religious Thought, or Ethics. Strong interest and ability in undergraduate teaching is important. Ph.D. required. Canadian citizens, landed immigrants and others eligible for employment in Canada at the time of application are especially encouraged to apply. Send applications to Terrence P. Hogan, Acting Head, Department of Religion, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

UNIVERSITY OF MANITOBA. Department of Religion. Applications are invited for a leave replacement position at the Lecturer or Assistant Professor level. Position begins on August 1, or September 1, 1980. Teaching area: Biblical Studies. Ph.D. or Ph.D. nearing completion required. Interest and ability in undergraduate teaching is essential. Canadian citizens, landed immigrants and others eligible for employment in Canada at the time of application are especially encouraged to apply. Send applications to Terrence P. Hogan, Acting Head, Department of Religion, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

SCIENCE FICTION

TRENT UNIVERSITY. Cultural Studies Pro-

gram. Science Fiction. Off-campus Winter Program in Shawna, 1980/81 Evening. The program invites applications for a part-time, sessional appointment for the academic year, 1980-81 (Evening). The successful applicant will have full responsibility for teaching Cultural Studies 295: Science Fiction. Enrollment in the course is limited to 30 students and the salary for the position is \$3500.00. Applications for the above position, accompanied by full curriculum vitae showing qualifications, previous experience, and giving names of three referees, should be sent to: Professor Richard Dellamora, Chairman, Cultural Studies Program, Trent University, Peterborough, Ontario, K9J 7B8. The position will remain open until filled.

SOCIAL SCIENCE

UNIVERSITY OF NEW BRUNSWICK. Division of Social Science. Tenured position to be filled in the undergraduate Psychology program at the Saint John campus. Position will involve teaching and research in the social - cognitive areas. Ph.D. preferred. Appointment at assistant professor rank or above; salary negotiable within established guidelines. Commence July 1, 1980, if possible. Applications, with detailed curriculum vitae supporting documentation, and three references to: R.E. Garland, Chairman, Division of Social Science, University of New Brunswick, P.O. Box 5050, Saint John, New Brunswick, Canada, E2L 4L5.

YORK UNIVERSITY. Institute for Behavioural Research. Research faculty in Social Science. Applications are invited for a one year term appointment, with possibility of renewal, commencing 1st May 1980 or as soon as possible after. Qualifications are Ph.D. or equivalent, in a social science and experience in social statistics, demography or survey research. Salary in the range of \$15,000 - \$20,000 per annum. Curriculum vitae and names of referees should reach the Director, York - IBR, 4700 Keele Street, Downsview, Ontario, M3J 2R6, as soon as possible.

SOCIAL WORK

UNIVERSITY OF WATERLOO. Renison College - Social Work. 1. Assistant Professor, Associate Professor or Professor of Social Work. 2. M.S.W. or D.S.W. and social work experience. 3. Undergraduate teaching. 4. Depending on qualifications and experience, Campbell, Principal, Renison College, University of Waterloo, Waterloo, Ontario, N2L 3G1. 6. September 1, 1980 or earlier.

DALHOUSIE UNIVERSITY. Maritime School of Social Work. Senior faculty position with teaching responsibilities in supervision and practice. The position involves teaching clinical practice theory with generalist social work practice theory courses and the offering of an optional family intervention course in a decentralized undergraduate program, and leadership in a specialization on the development of family functioning in a new one-year graduate program. Qualifications: Extensive family counseling practice; M.S.W. with a D.S.W. or Ph.D. focused on family social work; university teaching experience; willingness to do some traveling in a decentralized program. Appointment at the Associate or Professor rank, salary negotiable. Date of Appointment: July 1, 1980. Subject to final budgetary approval. Please send C.V. and the names of three referees to: C.G. Gifford, Director, Maritime School of Social Work of Dalhousie University, 6414 Gorbarg Road, Halifax, Nova Scotia, B3H 3J5.

UNIVERSITY OF MANITOBA. School of Social Work. Two faculty positions at Assistant or Associate level will be available as of July 1, and/or September 1, 1980. The principal duties will involve field and practice instruction with opportunities for undergraduate and graduate classroom teaching and for research. Interest in working with students in a generic program at an undergraduate level is essential. The School wishes to augment its supervisory staff in a number of areas which include corrections, the aged, children's services and health services. Candidates are required to have a post-graduate degree in social work as well as extensive experience in professional practice. Prior experience in supervision or teaching is desirable. Canadian citizens, permanent residents and others eligible for employment in Canada at the time of ap-

publication are especially encouraged to apply. Applications from both women and men are invited. Rank and salary will be commensurate with qualifications. Apply in writing as soon as possible to Professor Addie Penner, Director, School of Social Work, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

SOCIOLOGY/ ANTHROPOLOGY

UNIVERSITY OF VICTORIA. Department of Anthropology. The University of Victoria invites applications for an appointment as Visiting Assistant Professor, effective September 1, 1980 to April 30, 1981. Applicants must be qualified to teach introductory and advanced courses in physical and introductory general anthropology. Anthropology Ph.D. required. Preference will be given to applicant also able to teach a course in Old World archaeology. Address application with curriculum vitae and the names and addresses of three referees to Chairman, Department of Anthropology, University of Victoria, Victoria, British Columbia, V8W 2Y2. Closing date for applications is April 30, 1980.

ST. FRANCIS XAVIER UNIVERSITY. Department of Sociology and Anthropology. Two possible vacancies at the Assistant level. Ph.D. required. Some combination of Introductory, Family, Race, Social Anthropology, Social Movements, Small Groups, Deviance, Medical. Appointment to be made September 1, 1980. Applications should be directed to Dr. Winston Jackson, Chairman, Dept. of Sociology and Anthropology, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 1Z2.

MCMASTER UNIVERSITY. Sociology Department. Applications are invited for a Senior Assistant Professorship commencing July 1980 with Ph.D. and teaching experience required. Specializations open, but will take into account developing departmental needs. Salary commensurate with qualifications and experience. Replies to Chairperson, Sociology Department, McMaster University, Hamilton, Ontario, Canada, L8S 4M4.

MCMASTER UNIVERSITY. Sociology Department. Applications are invited for a one-year visiting Associate Professor commencing July-August, 1980 with Ph.D. or equivalent and at least six years of teaching and research experience. Overseas applications welcomed from established scholars. Specializations open but desirable if related to Departmental specializations of Inequality, Organizations or Individual and Society. Salary commensurate with qualifications and experience. Base salary for Associate expected to be around \$23,000. Replies to Chairperson, Department of Sociology, McMaster University, Hamilton, Ontario, L8S 4M4.

MCMASTER UNIVERSITY. Sociology Department. Applications are invited for a Lecturer/Assistant Professorship on a contractually limited basis commencing July 1980. Ph.D. is desirable and necessary for Assistant Professorship status. Specializations open, but will take into account developing departmental needs. Salary commensurate with experience and qualifications. Replies to Chairperson, Sociology Department, McMaster University, Hamilton, Ontario, Canada, L8S 4M4.

STATISTICS

UNIVERSITY OF MANITOBA. Department of Statistics. Two 10-month seasonal appointments effective September 1, 1980 are available. The rank and salary will be dependent upon qualifications and experience. The duties involved will be to teach at undergraduate as well as graduate level and to carry out research and/or consulting in Statistics. Send vitae and at least two letters of reference to: Dr. S.K. Sinha, Acting Head, Department of Statistics, University of Manitoba, Winnipeg, Manitoba, Canada, R3T 2N2.

URBAN AND RURAL PLANNING

NOVA SCOTIA TECHNICAL COLLEGE. Faculty of Architecture. Department of Urban and Rural Planning. Applications are invited from highly qualified academics

and/or professionals for teaching and research in the Department of Urban and Rural Planning, which offers a professional Master's degree following successful completion of a two-year co-operative (work-study) program. Ph.D. in Planning or related discipline is desirable. Specializations in regional science and quantitative methods will be given preference. Membership (or immediate eligibility) in the Canadian Institute of Planners is essential. In the first instance, enquiries should be accompanied by statements of interest and availability, together with resumé and names of references, addressed to Prof. Dimitri Procos, Head, Department of Urban and Rural Planning, Nova Scotia Technical College, P.O. Box 1000, Halifax, Nova Scotia, B3J 2X4. The appointment could be in early 1980.

VETERINARY MEDICINE

UNIVERSITY OF SASKATCHEWAN. Western College of Veterinary Medicine. Department of Clinical Studies. The Department of Veterinary Clinical Studies, Western College of Veterinary Medicine, is inviting applications for an open faculty position at the Assistant Professor level. Theriogenology. Applicants must have a D.V.M., an advanced degree, specialty training and experience in theriogenology and be qualified for a license to practice in Saskatchewan. Board certification or eligibility for board certification is also required. The duties will include teaching at both the undergraduate and graduate levels. Participation in clinical service, continuing education and extension activities is expected. Clinical investigation, research and scholarly development will be strongly encouraged. The position will be available starting 1 July 1980. Selection will be made on recommendation by a selection committee. The position is subject to budgetary approval. Applications should include curriculum vitae and three references. Applications and enquiries should be made to: Dr. W.M. Adams, Chairman, Department of Clinical Studies, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF SASKATCHEWAN. Western College of Veterinary Medicine. Department of Veterinary Microbiology. The Department of Veterinary Microbiology of the University of Saskatchewan has a short-term job available to replace a faculty member who will be absent on a year's sabbatical leave. He/she will be required to teach undergraduate virology to veterinary students and to participate in a research program on bovine respiratory disease. The candidate should have advanced training in cell-mediated immunity and a knowledge of its role in the pathogenesis and resolution of viral disease. Applications to Head, Department of Veterinary Microbiology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

UNIVERSITY OF SASKATCHEWAN. Western College of Veterinary Medicine. Department of Veterinary Pathology. Instructor required, July 1, 1980 to June 30, 1981 only, to assist in laboratory instruction, both histopathology and gross specimens, in general and systemic pathology as well as some laboratory periods with 3rd and 4th year students. A diagnostic necropsy service component is also a part of the responsibilities. The D.V.M. degree or equivalent is essential and the successful applicant must, on appointment, become a member of the Saskatchewan-Veterinary Medical Association. Salary range under negotiation: for 1978-79 \$16,000 to \$18,000. Reply: Send Curriculum Vitae plus 3 letters of reference to Dr. J.H.L. Mills, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.

ASHLEY FELLOWSHIP

TRINITY COLLEGE, UNIVERSITY OF TORONTO. Ashley Fellowship. The Provost of Trinity College announces a competition for the C.A. Ashley Fellowship for September, 1980. The Fellowship is open to members of the Teaching Staff of the University of Toronto, and others, who indicate a willingness to live in Trinity College

and to attempt to exemplify those friendly and scholarly qualities that made Professor Ashley's presence in Trinity College of great value to students and staff members. No specific duties are attached. A small apartment will be provided. The Fellowship is awarded for a period of up to three years and is renewable. Further information may be obtained from: The Registrar, Trinity College, Toronto, Ontario, M5S 1H8.

SABBATICAL RENTAL

SABBATICAL RENTAL — SOUTH OF FRANCE. Spacious house (former chateau), courtyard garden, telephone, garage, fully furnished and equipped. 12 miles from Montpellier. Available September 1, 1980 to June 15, 1981. Rent: 1,100 francs monthly plus utilities. Phone: W.A. Oliver (416) 978-2652 or 690-4481.

LATE ADS

UNIVERSITY OF MANITOBA. School of Music. Position in theory/composition. Should hold Ph.D. with successful teaching experience and scholarly activities. Duties include teaching of undergraduate theory; ability to teach aural skills and/or related academic areas an asset. Salary and rank according to qualifications and experience. Effective date of appointment 1 September 1980. Closing date for applications is when position filled. Send applications, with curriculum vitae and three references, to Professor Paul W. Paterson, Director, School of Music, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

DALHOUSIE UNIVERSITY. Department of History. 1. Assistant Professor or Lecturer as Sabbatical Leave replacement. 2. Ph.D. preferred; teaching experience required. 3. Undergraduate courses in Canadian Social and Economic History in the 19th and 20th Centuries. 4. Salary according to experience (1979-80, salary minimum for Assistant Professor was \$17,750, P.A. for Lecturer \$15,086, P.A.). 5. Send curriculum vitae and three references to Professor Judith Lingard, Department of History, Dalhousie University, Halifax, N.S., B3H 3J5. 6. Effective 1 September 1980. 7. Closing date May 15, 1980.

ACADIA UNIVERSITY. Department of Sociology. Subject to the availability of funds, a regular full-time tenure track appointment beginning 1 July 1980. Doctorate or equivalent required. Teaching experience preferred. Rank and salary commensurate with qualifications and experience. Send curriculum vitae and names of three referees to Dr. Mervin Y.T. Chen, Chairperson, Selection Committee, Department of Sociology, Acadia University, Wolfville, N.S., B0P 1X0, by 15 May 1980.

UNIVERSITY OF MANITOBA. School of Music. A violin instructor is required. D.M.A. or equivalent is preferred, with successful studio teaching and performance experience. Duties to include teaching violin majors and developing the string program. Ability and interest in a related area (orchestral conducting, pedagogy and literature, chamber music) an asset. Salary and rank commensurate with qualifications and experience. Date of appointment 1 September 1980; deadline for applications curriculum vitae, names of three referees and a tape recording made recently to Prof. Paul W. Paterson, Director, School of Music, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

UNIVERSITY OF TORONTO. SCARBOROUGH COLLEGE. Life Sciences Division. Psychology. Two-year contractually limited appointment at the assistant professor level, starting July 1, 1980, with possibility of limited renewal. Preference will be given to candidates with teaching and research competence in one or more of the following fields: abnormal psychology, behaviour modification and neuropsychology. Current salary floor is \$17,400. Curriculum vitae and three letters of reference should be sent to: Chairman, Search Committee for Clinical/Neuropsychology position, Life Sciences Division, Scarborough College, University of Toronto, 1245 Military Trail, West Hill, Ontario, M1C 1A4. Deadline date for applications is April 30, 1980.

UNIVERSITY OF ALBERTA. Faculty of Home Economics. The Division of Foods and Nutrition is seeking a nutritionist to teach undergraduate and graduate courses

and to develop a research program in nutrition and metabolism. Preference will be given to applicants with a Ph.D. in nutrition with an emphasis in biochemistry and physiology. Current salaries: 1979-80 floors — Assistant — \$19,696; Associate — \$25,576. Effective date of appointment is July 1, 1980. Appointment subject to budget allocation. A curriculum vitae and names of three references should be forwarded to Dr. Ruth Renner, Chairman, Division of Foods and Nutrition, Faculty of Home Economics, University of Alberta, Edmonton, Alberta, T6G 2M8. (The University of Alberta is an Equal Opportunity Employer).

UNIVERSITY OF OTTAWA. Economics. 1. Visiting Professor at the Catholic University of Peru under a Canadian International Development Agency Exchange Program administered by the University of Ottawa — (two positions). 2. Candidate must have a specialization in one or more of the following fields: quantitative methods; economic development; international trade; economic planning or economics of natural resources. 3. Salary commensurate with qualifications. 4. Submit curriculum vitae to Professor John Kuiper, Director, Peru Project, Faculty of Social Sciences, Department of Economics, University of Ottawa, Ottawa, Canada, K1N 6N5. 5. July 1, 1980. 7. When positions are filled.

UNIVERSITE DE L'ALBERTA. Faculté Saint-Jean. 1. Professeurs d'Éducation en Études Sociales, Mathématiques et Sciences à l'élémentaire et au secondaire. 2. Rang et traitement: Professeur adjoint, \$19,696-\$25,575. 3. Les candidatures (curriculum vitae et lettres de références) devront être envoyées au Doyen de la Faculté Saint-Jean, 8406-91e rue, Edmonton, Alberta, T6C 4G9. Sujet à la disponibilité des fonds.

CONCORDIA UNIVERSITY. Department of Mathematics. Department of Mathematics anticipates a position in applied mathematics, possibly jointly with the Faculty of Engineering, pending final budgetary approval. Applicants must have a strong commitment to teaching as well as demonstrated research abilities, preferably in operations research. Duties will include undergraduate and graduate teaching, research, and working with other members of the department to develop programmes in applied mathematics. Rank and salary will depend on qualifications. Vitae and three letters of recommendation by April 30, 1980 to Dr. Proppé, Chairman, Department of Mathematics, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec, H4B 1R6.

UNIVERSITY OF ALBERTA. Faculty of Dentistry. The Faculty of Dentistry at the University of Alberta invites applications for two full-time positions — one is in the Division of Fixed Prosthodontics and the other in the Division of Periodontics, available July 1, 1980. Responsibilities include administration, teaching, and research of all aspects of the discipline. Preference will be given to candidates with D.S. or equivalent and a graduate or postgraduate dental education. Rank and salary are commensurate with education and experience. Intramural private-practice facilities are available. Applicants should be eligible for licensure in the Province. The University of Alberta is an equal opportunity employer. All enquiries and curricula vitae should be forwarded within one month to Dean G.W. Thompson, Faculty of Dentistry, University of Alberta, Edmonton, Alberta, Canada, T6G 2N8.

UNIVERSITY OF BRITISH COLUMBIA. Bio-Resource Engineering Department. Faculty vacancy for Food Process Engineer. Position to be filled: Assistant Professor of Food Process Engineering. Name of work: Teaching undergraduate and graduate courses, research and public service. Location: Bio-Resource Engineering Department, University of British Columbia, Vancouver, British Columbia, Canada. Experience required: Candidates with practical experience preferred. Educational background: Ph.D. in Food Engineering, Bio-Resource Engineering, Agricultural Engineering or related field. Special Interest in Process Control and Development of Micro-Processor application in the food industry desired. Qualifications required: Strong in teaching students in both Engineering and Agriculture, an ability to foster a strong research and development program in co-operation with other faculty members and industry. Salary: At the Assistant Professor level. Closing date: When position filled. Contact: Professor L. Stroy, Chairman of Search Committee, Bio-Resource Engineering Department, University of British Columbia, 2357 Main Mall, Vancouver, British Columbia, Canada, V6T 1W5. Phone: (604) 228-3475.

Economic benefits ...p. 44

$\times 1/35 \times \text{years after } 01.01.66$.
Making the usual assumptions of 35 years of service and an average salary of \$30,000 for the best five years service, this model calculation results in the following minimum annual guaranteed pension:
($1.7\% \times \$30,000 \times 35$) - $\$2600 \times 1/35 \times 12.5$
= \$17,850 - 928.60
= \$16,921.40

The Retired Professors Survey however, showed that, on average, university teachers had only 23.4 years of credited service. This more realistic figure results in the following minimum annual guaranteed pension:
($1.7\% \times \$30,000 \times 23.4$) - ($\$2,600 \times 1/35 \times 12.5$)
= \$11,934 - 928.60
= \$11,005.40

This figure is \$5916 less than that produced by the model pension calculation, and more closely approximates the average Total Annual Pension of \$11,378 reported for 1977 in the Retired Professors Survey.

The Retired Professors Survey provides evidence that the actual length of credited service is much lower than 35 years, resulting in lower pensions (see Table III). Six categories were formed to describe the distribution of the variable, total years as a member of a pension plan: four years or fewer, five to nine years, ten to fourteen years, fifteen to nineteen years, twenty to twenty-four years, and twenty-five years or more. With the exception of the last category, responses were fairly evenly distributed over all the categories with between 21 and 33 respondents in each category. The last category was strongly represented, containing 99 out of 231 professors. In general, the longer a professor was a member of a pension plan, the higher the resulting pension, though there were some exceptions. The twenty-eight professors who were members of a pension plan for less than five years received a higher pension than those twenty-one who were members for from five to nine years. One possible explanation for this trend is that pension plans may have improved during the last five years, thereby increasing the pensions of more recent retirees. Progressively higher pensions were received by those who were members for more than ten years.

Table III illustrates the relationship between amount of pension and credited years of service. The province of New Brunswick and those west of New Brunswick are associated with average or near average annual university pensions (\$8304) and near average number of credited years of service (23.4). Of the remaining provinces, however, Nova Scotia had much lower than average number of credited years of service which explains in part the much lower than average pension. Prince Edward Island, on the other hand, had a very high average pension and a larger number of credited years of service. The high pension and low number of credited years of service in Newfoundland may result from a superior pension plan.

Indexing

One third of the retired professors surveyed reported that they did not receive any periodic increases in their university pensions at all. Of the one-hundred and fifty-two professors who indicated that they had received increases in their pensions, twenty-one per cent reported that they received formal increases and forty-eight per cent received ad hoc increases. Some professors received both formal and ad hoc increases.

Professors receiving formal indexing of their pensions were asked to indicate the maximum amount of indexing received. Indexing was expressed as a per cent of university pension. The forty-three replies ranged from a minimum of 2.0 per cent to a maximum of 8.0 per cent with a mean of 3.2 per cent. One retired professor described his university's 3.0 per cent indexing policy as "disgraceful." A glance at the Consumer

TABLE III
Average university pension by years of credited service

Province	Average university pension	Average no. of years in plan
British Columbia	7112.53	25.4
Alberta	9502.15	23.2
Saskatchewan	7287.40	24.4
Manitoba	8330.43	22.4
Ontario	8461.64	23.4
Quebec	8971.26	21.6
New Brunswick	8221.20	26.2
Nova Scotia	5151.69	17.8
Prince Edward Island	14,166.67	32.7
Newfoundland	12,500.00	22.0
Total Sample	8303.78	23.4

TABLE IV
Effect of indexing on amount of university pension

University pension categories	Indexed pensions		Non-indexed pensions		Total	
	no.	%	no.	%	no.	%
under \$5000	38	25%	21	30%	62	27%
\$5000 - \$7500	24	16%	15	22%	40	17%
\$7500 - \$10000	27	18%	15	22%	42	18%
\$10000 - \$12500	26	17%	8	12%	34	15%
\$12500 - \$15000	15	10%	5	7%	20	9%
over \$15000	22	15%	5	7%	27	12%
TOTAL	152		69		225	

a. Six professors did not report their pension category.

Price Index increases from 1974-75 to 1977-78 justifies his opinion. In 1974-75 the CPI had increased by 11.2 per cent since the previous year, in 1975-76 it had increased by another 9.7 per cent, in 1976-77 by 6.7 per cent and in 1977-78, the year of the Retired Professors Survey, the CPI had increased by 8.8 per cent over the previous year. An indexing policy of a meagre 3 per cent means a large loss in buying power for the retired teacher if it is pursued for a long period.

It is worth stressing that the maximum amount of indexing received by the older retired professors (those who retired before January 1, 1971) was only 3 per cent. The mean indexing provision was 2.2 per cent for this group. Only in a very few cases did professors retiring after January 1, 1971 receive the maximum figure of 8 per cent.

One-hundred and ten retired professors reported receiving ad hoc increases in their university pensions. Of these, sixty-seven professors stated the dollar amounts of increase received. The number of ad hoc increases ranged from one to eight per person although the majority (40 out of 67 professors) had received either one or two increases since they retired. The value of these increases ranged from less than \$100 to over \$4000. Ninety-four (55%) out of a total of one-hundred and seventy-two increases

amounted to less than \$500. Forty-six (27%) were between \$500 and \$1000, twenty-six (15%) were between \$1000 and \$2000 and six were over \$2000. The average ad hoc increase was \$647.

Annual university pension and indexing

Table IV, presented above, illustrates the effect of indexing on the amount of university pension received. Taking account of the fact that the majority of retired professors have pensions under \$10,000 per annum, it appears that higher pensions are more likely to be received with indexing than without indexing. For example, sixty-three (42%) out of the one-hundred and fifty-two pensioners who have indexed pensions earn over \$10,000, while only eighteen (26%) out of the sixty-nine pensioners not benefiting from indexing have pensions over \$10,000.

Conclusion

If this survey is in any way representative, any retired university teachers that had to rely solely on their university pensions would experience very difficult times. The Canadian Government, however, also contributes to pensions, in the form of Old Age Security and the Canada Pension. Some

retired professors also receive industry pensions and other non-university pensions. The total annual pension is the sum of all the pension funds received.

Figure 1, presented below, illustrates a static picture of the salaries of the teaching profession in 1977-78. The graph compares the average total 1977-78 pensions of retired professors with average 1977-78 salaries received by professors employed at Canadian Universities.

Even with government pensions the mean salary-age profile expresses dramatically the plight of individuals who, after years of increasingly higher salaries, retire and are suddenly faced with an income well below the average starting salary of young professors, and thousands of dollars below their own previous earnings.

Why are retired professors' pensions so low? Without a more thorough study of the problem one can only speculate. The Retired Professors Survey does suggest several possible reasons that could be explored in detail. The relatively small number of years of credited service is one factor contributing to low pensions. Problems of portability and transferability of plans may account for this. Many of the retired professors surveyed indicated great difficulty in transferring pension plans from one university to another and often the portability of plans did not apply at all. The past inflexibility of pension plans is detrimental to the well-being of the employees of Canadian universities.

Another possible explanation for the low pension received by retired university teachers could be the existence of inadequate pension plans at many Canadian universities. A poor return-on-investment in the case of money purchase plans could be another factor explaining a low university pension.

Indexing is very low in comparison with increases in the Consumer Price Index, and in too many cases is non-existent. In one case at least the university subsidized their own pension provisions out of the indexing provisions of the federal government. This might explain why some professors complained that instead of receiving periodic increases in their pensions they received periodic decreases.

The grave situation portrayed by this preliminary survey of retired university teachers demands verification and more detailed study. A larger sample size, a more clearly worded questionnaire, and more current data are among the factors vital to a clearer understanding of the plight of our retired university teachers.

Footnotes

1. See "Impact of Federal Retirement-Age Legislation on Higher Education. A Report of The Special Committee on Age Discrimination and Retirement." AAUP Bulletin September 1978, pp. 181-192.
2. Note that the average number of credited years of service was 25.1 for those retiring before January 1971 and 22.9 for those retiring on or after January 1971.
3. This average salary of \$30,000 applies to a person retiring in 1979-80.
4. CPI increases were calculated using the following formula:

* CPI change

CPI index for academic year N - CPI index for academic year (N-1) $\times 100$

CPI index for academic year (N-1)

5. Salary data for all Canada excluding Quebec was derived from Statistics Canada tables and includes professors in non-medical fields, with and without administrative duties and both sexes.

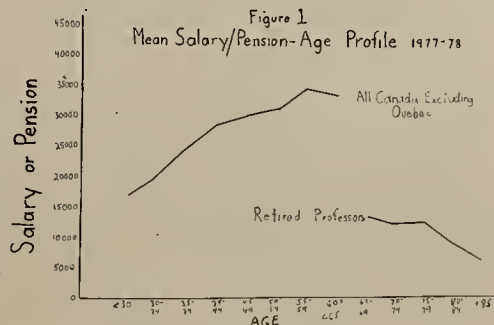
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ECONOMIC BENEFITS. BENEFICES ECONOMIQUES

Introduction

In 1975, the Retired University Teachers Committee (RUTC) was established at the request of the Canadian Association of University Teachers (CAUT) to undertake a New Horizons Project to study the problems peculiar to retired university teachers. In 1977, the Committee established a register of 486 retired professors, compiled from lists provided by Canadian universities.

In 1978, the CAUT conducted a preliminary survey on the pensions and benefits of retired university teachers. The sample of professors was derived from the register established by the RUTC. The CAUT sent questionnaires to all professors included in the register, and, to date, two hundred and thirty-one replies have been received. These two hundred and thirty-one questionnaires form the basis for the analysis in this report.

Given that membership on RUTC's register was voluntary, the respondents to the questionnaire cannot be assumed to be a completely representative group. If we assume age profiles are the same for both retired professors and the Canadian population over 65, it appears that professors between 65 and 75 years of age are over represented, while professors over 75 are under represented. In addition, comparing figures for total number of working professors in each province with the number of retired professors responding from each province suggests that Newfoundland, Prince Edward Island, New Brunswick and Quebec are slightly under represented in the survey. In spite of the deficiencies of the sample, the survey does fulfil the purposes for which it was designed. It gives CAUT some idea of the problems and interests important to retired professors and it helps to define parameters to be included in a more thorough survey of retired faculty.

A preliminary analysis of the responses to the Retired Professors Survey indicated that most of the teachers surveyed had retired relatively recently. Out of a total sample of 231 professors, 55 retired before January 1, 1971 and 176 retired on or after January 1, 1971. The analysis also suggested that professors who had been retired for a longer length of time were worse off in terms of pension received than the more recent retirees. Because of these observations, it was thought appropriate to divide the respondents into two groups, those who retired before January 1, 1971 and those who retired on or after that date. The formation and analysis of these two groups should, in some cases, remove the bias of the data and should help to identify more clearly the problems of retired professors. In spite of the size of the pre-1971 sample, definite trends in the data have emerged.

Over forty variables were used to analyse the retired professor data. Of these only those relating to age at retirement, province of institution, number of years of membership in pension plans, indexing of pension and amounts of annual pension will be discussed at any length in this report.

Age of retirement

The professors surveyed retired at ages ranging from 57 years to 75 years with a mean age of retirement of 65.5 years. The range of ages spanned eighteen years and the standard deviation was only 2.4 years indicating that, in this case at least, the mean is a good indicator of faculty age at retirement. The mean age of retirement for

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those who retired before January 1, 1971 was almost identical to the mean for those who retired after that date.

Three retirement age categories can be formed. Almost half (48.1%) of the professors retired at age 65. Only forty teachers (17.3%) retired before the age of 65 whereas eighty teachers (34.6%) retired after the age of 65. This indicates that 65 is the most usual retirement age for Canadian university professors. In addition, those who do not retire at 65 are more likely to retire after that age than to retire earlier.

In the United States, the American Association of University Professors (AAUP) noticed a different trend. Although most (42.3%) professors retired at age 65 and 66, more (32.4%) retired before that age than after that age (25.3%). This tendency towards early retirement is prevalent throughout the U.S. labour force.

Because of this difference between Canadian and American retirement trends, care must be taken in applying the findings of American studies of retirement to the Canadian situation.

Annual university pension

The Retired Professors Survey asked respondents to indicate the annual amount received from their University pension plan. The questionnaire contained seven pension categories: under \$5,000; \$5,000 to \$7,500; \$7,500 to \$10,000; \$10,000 to \$12,500; \$12,500 to \$15,000; \$15,000 to \$20,000; and over \$20,000. The latter two categories were later combined to form one category: over \$15,000.

Over one quarter of the retired professors surveyed received less than \$5,000 as a university pension (see Table I). Just under

one fifth received between \$5,000 and \$7,500 and another fifth were given \$7,500 to \$10,000. Almost two thirds of the professors received less than \$10,000 per annum from their university pension. In a few cases individuals received pensions from more than one university, but it appears that in most cases individuals received a pension from only one university.

The mean university pension was approximately \$8,304 per annum for the complete sample, \$8,857 for those who retired on or after January 1971 and \$6291 for those who retired before January 1971. The mean total annual pension, which includes Canada Pension, Old Age Security and other pensions in addition to university pension, was \$11,378 for the complete sample.

Province of institution

Professors from forty different institutions in all ten provinces responded to the Retired Professors Survey. Table II, presented below, illustrates the number of responses for each province, showing corresponding average university pensions.

A glance at the breakdown table (Table II) for pensions by province reveals no apparent regional variations in university pensions. The Atlantic region, for example, provides extremely high as well as extremely low pensions. Prince Edward Island and Newfoundland are only represented by three professors each, but these professors receive relatively high pensions, the highest pensions in the whole of Canada. Nova Scotia, on the other hand, has the lowest pensions in Canada, while New Brunswick's pensions are slightly below the Canadian average of \$8,304. Of the Atlantic provinces, Nova Scotia had the highest representation and it is quite possible that, were the sample representative for Prince Edward Island, Newfoundland and New Brunswick, their respective mean pensions might decrease.

Both Ontario and Quebec had pensions which were slightly above the Canadian average, though Quebec's pensions were higher than Ontario's.

Of the Western provinces, Manitoba and Alberta had above average pensions, with Alberta's among the highest in the country. British Columbia and Saskatchewan had low pensions, but by no means as low as Nova Scotia's.

Years of membership in pension plan

Although the retired professors surveyed were faculty members for up to fifty years, they tended to be members of their university's pension plan for a shorter length of time. Professors were pension plan members from as little as three years before retiring to as many as forty-five years. The average number of years was 23.4. (The average number of years on faculty was 26.9, but because of the wording of the questionnaire, it is not clear whether this applies to one university only).

In some studies of university pensions, model calculations of the pension are made using an assumption of 35 years of credited service. It seems that this assumption does not apply to many teachers.

The influence of years of service on the amount of pension can be demonstrated using an example. A typical university plan uses the following model to determine minimum guaranteed pension:

$$(1.7\% \times \text{Average best 5 years earnings} \times \text{no. of years of credited service}) - (\text{CPP benefit})$$

TABLE I
Amount of university pension

University pension categories	no.	%
under \$5000	62	27%
\$5000 - \$7500	40	17%
\$7500 - \$10000	42	18%
\$10000 - \$12500	34	15%
\$12500 - \$15000	20	9%
over \$15000	27	12%
TOTAL	225 ^a	

a. Six professors did not report their pension category.

TABLE II
Average university pension by province

Province	Average pension	No. of respondents
British Columbia	7112.53	30
Alberta	9502.15	26
Saskatchewan	7287.40	15
Manitoba	8330.43	14
Ontario	8461.64	97
Quebec	8971.26	23
New Brunswick	8221.20	5
Nova Scotia	5151.69	13
P.E.I.	14,166.67	3
Newfoundland	12,500.00	3
Total Sample	8303.78	229 ^b

a. The pension used to calculate this table is the pension received from this university, and excludes other sources of pension such as CPP, OAS, and private pensions.

b. Some individuals did not state the amount of university pension received, therefore the total does not add up to 231.

c. Pensions were comparatively lower for professors retiring before 1971 than after, in New Brunswick, British Columbia and Quebec. In the other provinces the pensions were similar throughout both retirement periods (note that there were no respondents retiring before 1971 from either Prince Edward Island or Newfoundland).